

Budapesti Műszaki Főiskola Kandó Kálmán Villamosmérnöki Főiskolai Kar Automatika Intézet Elektronika Szakcsoport



Házi feladat Digitális technika I. tantárgyból 2005/2006. tanév I. félév

Témakör: Kombinációs hálózatok

Feladat bemutatása: Szóbeli vizsgán

<u>Függvény:</u> A saját függvényét a következő oldaltól kezdődő táblázatban találja meg. **Minden függvény 5 változós!**

Megjegyzések:

- a) A házi feladathoz csatoljon előlapot, mely tartalmazza az ön által megoldott függvényt, az ön nevét, neptun kódját, és a tanévet.
- b) Feladatmegoldás közben törekedjen az egyértelmű és áttekinthető munkára.
- c) Elektronikus formában beadott házi feladatot nem áll módunkban elfogadni.
- d) A függvény megadásánál a pluszjel után található számok határozatlan függvényértékekre utalnak.
- e) A változókat és a súlyukat egyértelműen adja meg az igazságtáblázat felírása előtt.
- f) Függvényegyszerűsítésre Karnaugh-táblázatos módszert használjon. Az összevonásokat egyértelműen jelezze.

Feladatok:

- a) Írja fel az F függvény igazságtáblázatát.
- b) Írja fel az F függvény diszjunktív kanonikus alakját.
- c) Írja fel az F függvény konjuktív kanonikus alakját.
- d) Határozza meg az F függvény legegyszerűbb alakját diszjunktív formában.
- e) Határozza meg az F függvény legegyszerűbb alakját konjuktív formában.
- f) A d) és az e) megoldásból válassza ki az ön által egyszerűbbnek vélt alakot. Döntését röviden indokolja.
- g) Készítse el az f) pontban választott függvényt megvalósító logikai vázlatot! A vázlatban kizárólag univerzális, kapukat használjon! Az áramkör bemenetén a változók csak ponált formában állnak rendelkezésre.
- h) Ellenőrizze, hogy az ön által választott függvény tartalmaz-e statikus hazárdot. Ha keletkezhet hazárd, akkor határozza meg a keletkezés feltételét, és egyértelműen jelölje (például más színnel rajzolja be) a függvény egyszerűsítésénél használt Karnaugh-táblán is.
- i) Adja meg a függvény legegyszerűbb hazárdmentes alakját.
- j) Egészítse ki a g) pontban készített logikai vázlatot hazárdmentésítést megvalósító kapukkal. Ha a módosítást az eredeti logikai vázlaton végzi el, akkor azt egyértelműen jelölje (például más színnel rajzolja be).

```
sz Neptun kód
                                                               Függvény
                F = \Pi (31, 30, 27, 24, 23, 22, 15, 14, 13, 12, 11, 10, 9, 8, 5, 4) X = (26, 25, 18, 17, 3, 0)
      A0832D
                 F = \Pi (31, 29, 28, 27, 22, 21, 20, 18, 15, 13, 12, 11, 6, 5, 4, 2) X = (17, 16, 8)
      A0BVRY
                F = \Sigma (2, 3, 4, 5, 10, 11, 12, 13, 24, 25, 26, 29, 31) X = (27, 28, 30)
      A0CL01
 4
      A0EEGX
                F = \Sigma (1, 5, 13, 15, 16, 18, 21, 23, 24, 26, 29, 31) X = (0, 3, 9, 12)
 5
                         (8, 10, 12, 14, 16, 17, 19, 23, 25, 27, 29, 31) X = (0, 3, 18, 20)
      AOMZVT
 6
                F = \Sigma (2, 3, 6, 7, 12, 13, 15, 16, 17, 20, 21, 28, 31) X = (14, 29, 30)
      A5YK23
 7
                F = \Sigma (3, 4, 5, 7, 8, 9, 19, 20, 21, 24, 25, 27, 31) X = (11, 15, 23)
      A6ZIS6
 8
                F = \Pi (31, 30, 29, 28, 27, 25, 22, 20, 14, 12, 7, 6, 5, 4, 3, 1) X = (16, 10, 2)
      A7K2BK
 9
                F = \Pi (30, 29, 28, 26, 24, 23, 21, 20, 18, 16, 12, 11, 9, 5, 3, 1) X = (31, 22, 13, 7)
      A8BAD3
                         (0, 1, 2, 6, 7, 9, 11, 15, 16, 18, 22, 23, 27, 31) X = (13, 29)
10
      A8HNXL
11
                F = \Pi (31, 30, 29, 27, 25, 19, 18, 17, 15, 14, 11, 9, 5, 3, 2, 1) X = (24, 21, 20, 13, 12, 0)
      A9DF58
12
                F = \Pi (31, 29, 28, 26, 25, 24, 23, 18, 15, 13, 12, 10, 9, 8, 7, 2) X = (17, 16, 4)
      A9GOLZ
                F = \Sigma (0, 4, 16, 18, 19, 22, 23, 25, 27, 29, 30, 31) X = (1, 9, 13, 20, 26)
13
      AAGK2A
14
                 F = \Pi (30, 29, 28, 24, 23, 21, 20, 17, 14, 12, 11, 9, 6, 4, 3, 1) X = (31, 25, 22, 19)
      AAM797
15
      AC0X4H
                F = \Pi (31, 30, 25, 24, 23, 21, 19, 17, 15, 14, 9, 8, 7, 5, 3, 1) X = (20, 16, 2)
                F = \Pi (31, 30, 29, 28, 23, 21, 19, 17, 11, 10, 9, 8, 7, 5, 3, 1) X = (18, 4, 2)
16
      ADVIW6
17
                         (3, 4, 6, 10, 15, 20, 22, 23, 26, 27) X = (5, 7, 11, 17, 19, 31)
      AIH5BH
18
                F = \Sigma (1, 3, 6, 10, 15, 17, 19, 23, 26, 30) X = (5, 7, 14, 20, 22, 31)
      AQSICT
19
                F = \Sigma (4, 5, 6, 7, 9, 11, 17, 23, 27, 29) X = (18, 19, 20, 21, 25, 31)
      AQUEIJ
20
                F = \Pi (30, 27, 26, 24, 22, 21, 18, 17, 15, 11, 10, 9, 6, 5, 2, 1) X = (31, 25, 14, 13)
      ARWX28
21
      AT9CI5
                F = \Sigma
                         (0, 1, 2, 6, 7, 14, 15, 23, 26, 27, 30, 31) X = (3, 8, 22, 24, 25)
22
                F = \Pi (26, 25, 24, 23, 22, 19, 18, 15, 14, 13, 12, 10, 7, 6, 5, 4) X = (3, 2)
      AU1XNP
23
                F = \Pi (28, 27, 26, 25, 24, 23, 22, 19, 18, 17, 16, 13, 12, 7, 6) X = (29, 21, 20, 14, 3)
      AU2PSJ
24
                F = \Sigma (2, 3, 8, 9, 18, 19, 20, 21, 22, 24, 25, 29, 31) X = (23, 28, 30)
      AWJELW
25
                F = \Pi (30, 28, 25, 22, 20, 19, 17, 15, 14, 13, 12, 11, 10, 9, 8) X = (27, 26, 24, 21, 6)
      AWOTEE
26
                 F = \Pi (28, 27, 26, 25, 24, 23, 22, 20, 19, 18, 13, 12, 7, 6, 3, 2) X = (17, 16)
      AWU3CE
27
                F = \Pi (28, 25, 24, 23, 21, 19, 17, 15, 14, 11, 10, 7, 5, 3, 1) X = (29, 26, 13, 9, 6)
      AYNTZ6
                         (0, 2, 3, 7, 14, 15, 16, 19, 23, 27, 30, 31) X = (4, 11, 12, 18, 28)
28
      B3YWEO
29
      B59DVG
                         (0, 1, 2, 3, 10, 11, 16, 20, 22, 23, 26, 27, 30, 31) X = (28, 29)
30
      B606SE
                F = \Pi (30, 28, 26, 24, 23, 22, 21, 20, 18, 16, 13, 12, 11, 9, 7, 5) X = (6, 4)
31
      B76375
                 F = \Pi (30, 29, 28, 26, 25, 24, 21, 20, 19, 17, 16, 14, 10, 7, 3) X = (23, 22, 18, 12, 11)
                         (0, 2, 3, 4, 7, 15, 19, 23, 26, 27, 30, 31) X = (6, 11, 16, 24, 28)
32
      BC5IP7
33
      BCPOYB
                         (1, 3, 6, 7, 8, 10, 17, 19, 22, 24, 26, 30, 31) X = (14, 15, 23)
34
                F = \Sigma (2, 3, 10, 11, 12, 13, 15, 16, 17, 24, 25, 28, 31) X = (14, 29, 30)
      BD2YPX
35
      BETQII
                 F = \Pi (28, 26, 24, 23, 21, 19, 17, 15, 14, 13, 12, 7, 6, 5, 4) X = (30, 25, 22, 20, 3)
36
                F = \Sigma (2, 6, 10, 14, 16, 17, 19, 23, 25, 27, 29, 31) X = (0, 9, 20, 24)
      BG1PN1
                 F = \Sigma (0, 8, 10, 13, 14, 15, 16, 26, 27, 29, 30, 31) X = (4, 5, 11, 21, 24)
37
      BIUQA1
38
                         (1, 2, 5, 10, 11, 14, 15, 17, 21, 27, 30, 31) X = (0, 6, 12, 18)
      BJT8DP
39
      BLEYL4
                F = \Sigma (4, 6, 8, 10, 17, 19, 20, 21, 22, 24, 26, 27, 31) X = (23, 25, 29)
                         (9, 10, 13, 15, 16, 20, 24, 27, 28, 30) X = (6, 11, 14, 18, 26, 31)
40
      BLLNCH
                 F = \Sigma (1, 3, 6, 9, 11, 14, 18, 23, 27, 30) X = (17, 19, 22, 24, 26, 31)
41
      BLYR21
42
                F = \Sigma (6, 7, 10, 15, 16, 17, 18, 19, 27, 30) X = (9, 11, 14, 24, 26, 31)
      BMTEJK
43
                 F = \Sigma (0, 2, 16, 20, 22, 23, 25, 27, 28, 29, 30, 31) X = (8, 9, 11, 18, 21)
      BN1Z0G
44
                 F = \Pi (30, 27, 26, 25, 22, 21, 18, 14, 13, 12, 11, 10, 9, 6, 5, 2) X = (24, 8)
      BPBPGK
45
      BQSC8K
                F = \Sigma
                         (2, 3, 4, 5, 18, 19, 20, 21, 24, 25, 26, 29, 31) X = (27, 28, 30)
46
                 F = \Pi (30, 28, 25, 24, 23, 22, 21, 20, 19, 17, 14, 12, 11, 9, 6, 4) X = (18, 16)
      BQW5FE
47
                         (0, 1, 16, 22, 23, 24, 25, 27, 28, 29, 30, 31) X = (4, 6, 7, 17, 26)
      BRB6K4
48
      BS6NJR
                         (0, 1, 8, 14, 15, 24, 25, 26, 27, 29, 30, 31) X = (2, 6, 7, 9, 28)
49
                 F = \Sigma (4, 5, 6, 7, 16, 24, 25, 27, 28, 29, 30, 31) X = (0, 9, 17, 18)
      BT5EKJ
50
                 F = \Pi (28, 27, 26, 23, 20, 18, 15, 12, 11, 10, 9, 7, 5, 4, 3, 2) X = (31, 21, 19, 13)
      BTHH1K
51
      BU6KSH
                         (2, 3, 4, 7, 11, 12, 15, 20, 23, 27, 28, 31) X = (0, 9, 10, 18)
                F = \Pi (30, 29, 28, 24, 23, 21, 20, 17, 11, 10, 9, 8, 7, 6, 5, 4) X = (31, 26, 25, 22)
52
      BUUF4N
53
                 F = \Pi (30, 27, 26, 25, 24, 22, 21, 14, 11, 10, 9, 8, 7, 6, 5, 3) X = (18, 2)
      BV9GNE
54
                         (6, 8, 9, 10, 11, 15, 18, 19, 23, 30) X = (5, 7, 12, 14, 22, 31)
      C1ERFP
                \mathsf{F} = \Sigma
                 F = \Pi (30, 28, 27, 26, 21, 19, 18, 14, 13, 12, 11, 10, 9, 5, 3, 2) X = (24, 8)
55
      C1J9UM
56
      C7MT99
                 F = \Pi (29, 28, 26, 25, 24, 23, 21, 19, 18, 17, 14, 10, 7, 5, 3, 1) X = (20, 16)
57
      C8MQ3J
                F = \Pi (28, 27, 25, 23, 22, 19, 18, 14, 12, 11, 9, 7, 6, 3, 2) X = (30, 26, 17, 13, 10)
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sz Neptun kód
                                                               Függvény
                 F = \Pi (31, 29, 27, 24, 23, 21, 15, 14, 13, 12, 11, 10, 9, 8, 6, 4) X = (26, 25, 18, 17, 3, 0)
      C92GL8
 59
                         (0, 2, 3, 4, 8, 11, 12, 15, 24, 26, 27, 28, 30, 31) X = (19, 23)
      C90QDR
                 F = \Pi (30, 25, 24, 23, 22, 18, 17, 16, 15, 13, 12, 7, 6, 5, 4, 3) X = (31, 26, 19, 14)
 60
      CAUX0B
                 F = \Pi (31, 30, 29, 28, 25, 24, 23, 22, 13, 12, 11, 10, 9, 8, 3, 2) X = (17, 4, 1)
 61
      CBIFUH
 62
                 F = \Sigma
                         (0, 1, 2, 4, 6, 9, 13, 15, 20, 21, 22, 23, 29, 31) X = (25, 27)
      CCQJOI
 63
      CDRNUQ
                         (31, 29, 27, 26, 23, 21, 19, 18, 14, 12, 11, 10, 6, 4, 3, 2) X = (16, 9, 8)
                         (0, 2, 16, 20, 22, 23, 25, 27, 28, 29, 30, 31) X = (8, 9, 11, 18, 21)
 64
      CGCW5E
 65
                 F = \Pi (29, 28, 26, 25, 24, 23, 22, 21, 20, 17, 16, 11, 10, 7, 6) X = (27, 19, 18, 14, 5)
      CHADCC
 66
                         (4, 5, 6, 7, 9, 15, 17, 19, 27, 29) X = (10, 11, 12, 13, 25, 31)
      CIU52C
 67
      CJJIN7
                 F = \Pi (31, 30, 29, 28, 27, 26, 24, 23, 21, 14, 12, 10, 9, 8, 6, 4) X = (25, 18, 17, 11, 3, 0)
 68
                 F = \Sigma (4, 5, 6, 7, 8, 9, 10, 11, 17, 19, 21, 27, 31) X = (23, 25, 29)
      CL6I1D
 69
      CLRKML
                 F = \Pi (31, 29, 27, 25, 23, 22, 21, 20, 14, 12, 10, 8, 7, 6, 5, 4) X = (18, 2, 1)
 70
      CLRVJI
                 F = \Pi (31, 29, 28, 26, 25, 24, 23, 21, 20, 18, 17, 16, 15, 10, 7, 2) X = (9, 8, 4)
 71
      CNQDBB
                         (2, 6, 7, 15, 16, 17, 22, 23, 24, 25, 30, 31) X = (0, 3, 5, 10)
                 F = \Sigma
 72
                         (0, 2, 4, 12, 14, 15, 21, 23, 28, 29, 30, 31) X = (6, 13, 16, 17, 19)
      CQHB7Y
 73
      CQRKBY
                 F = \Pi (31, 29, 27, 25, 23, 22, 21, 20, 18, 16, 15, 12, 7, 6, 5, 4) X = (14, 13, 10, 9, 3, 0)
 74
                 F = \Pi (31, 30, 28, 27, 23, 22, 20, 19, 14, 13, 12, 9, 6, 5, 4, 1) X = (24, 8, 2)
      CXFC0Z
 75
      CYTXAF
                 F = \Pi (28, 27, 26, 23, 20, 18, 15, 12, 11, 10, 9, 7, 5, 4, 3, 2) X = (31, 21, 19, 13)
                         (0, 4, 8, 10, 16, 17, 20, 21, 25, 26, 27, 29, 30, 31) X = (11, 15)
 76
      CSYJZA
 77
      D2DDUE
                 F = \Pi (29, 28, 25, 24, 22, 19, 18, 15, 13, 11, 9, 7, 5, 3, 1) X = (26, 23, 21, 17, 12)
 78
                 F = \Pi (31, 30, 29, 28, 26, 24, 23, 21, 18, 16, 15, 14, 12, 10, 9, 8) X = (13, 11, 6, 5, 3, 0)
      D327Z1
 79
                 F = \Pi (29, 27, 25, 24, 23, 19, 18, 17, 14, 12, 10, 8, 7, 5, 3, 1) X = (31, 28, 26, 21)
      D4AV2A
 80
                 F = \Pi (30, 29, 23, 22, 21, 20, 18, 17, 13, 12, 11, 10, 5, 4, 3, 2) X = (31, 28, 26, 19)
      D5EZGB
 81
      D7U19N
                 F = \Pi (28, 25, 24, 23, 22, 20, 19, 18, 15, 14, 13, 12, 7, 6, 3, 2) X = (5, 4)
                 F = \Sigma
 82
      D930JT
                         (1, 3, 9, 11, 12, 14, 15, 16, 18, 24, 26, 28, 31) X = (13, 29, 30)
 83
                         (4, 5, 8, 10, 13, 15, 21, 23, 24, 26, 29, 31) X = (0, 6, 17, 20)
      DA28NN
                 F = \Sigma
                 F = \Pi (30, 29, 28, 26, 22, 21, 20, 19, 18, 17, 13, 12, 11, 5, 4, 3) X = (24, 16)
 84
      DAJRDM
                         (1, 3, 4, 6, 17, 19, 20, 22, 24, 25, 26, 30, 31) X = (27, 28, 29)
 85
      DBOGHR
                         (5, 8, 9, 10, 11, 15, 17, 19, 23, 29) X = (6, 7, 12, 13, 21, 31)
 86
                 F = \Sigma
      DGORET
                 F = \Pi (29, 28, 27, 25, 22, 19, 17, 14, 13, 12, 11, 10, 9, 6, 3, 1) X = (24, 8)
 87
      DGWIL9
 88
                 F = \Sigma (1, 3, 4, 6, 17, 19, 20, 22, 24, 26, 27, 28, 31) X = (25, 29, 30)
      DIAI1F
 89
                 F = \Sigma (0, 2, 8, 12, 13, 14, 15, 25, 27, 29, 30, 31) X = (1, 10, 17, 19, 28)
      DLB4ZM
                 F = \Pi (31, 29, 28, 27, 24, 23, 21, 20, 19, 16, 15, 13, 12, 6, 5, 4) X = (14, 10, 9, 7, 3, 0)
 90
      DLEE2L
 91
                         (0, 1, 4, 11, 15, 17, 19, 21, 23, 27, 29, 31) X = (2, 5, 10, 14, 25)
      DP9VBX
 92
      DRC4BC
                 F = \Pi (31, 30, 29, 27, 26, 25, 22, 18, 14, 10, 7, 6, 5, 3, 2, 1) X = (16, 12, 4)
                         (1, 5, 6, 12, 15, 17, 21, 23, 28, 30) X = (3, 7, 14, 18, 22, 31)
 93
      DRS9MT
 94
                 F = \Sigma (1, 3, 9, 11, 12, 13, 14, 16, 18, 24, 26, 30, 31) X = (15, 28, 29)
      DRSRZL
 95
                 F = \Pi (30, 29, 28, 26, 25, 24, 22, 20, 18, 16, 13, 11, 10, 9, 7, 3) X = (12, 8)
      DTUHI0
 96
                         (0, 8, 10, 13, 14, 15, 16, 26, 27, 29, 30, 31) X = (4, 5, 11, 21, 24)
      E1FH7B
 97
                         (2, 3, 4, 10, 11, 20, 22, 23, 28, 29, 30, 31) X = (0, 5, 12, 24)
      E2AIK5
 98
                         (2, 3, 10, 11, 12, 13, 14, 16, 17, 24, 25, 29, 31) X = (15, 28, 30)
      E3NELW
                         (0, 2, 3, 4, 7, 11, 15, 23, 26, 27, 30, 31) X = (6, 8, 19, 24, 28)
      E3ZJM3
                         (2, 10, 14, 15, 16, 17, 20, 21, 26, 27, 30, 31) X = (0, 3, 6, 12)
100
      E5ZJQL
101
                 F = \Sigma
                         (0, 1, 8, 12, 13, 15, 26, 27, 28, 29, 30, 31) X = (9, 14, 16, 18, 19)
      E637D7
                         (0, 1, 3, 4, 7, 12, 13, 15, 16, 20, 23, 28, 29, 31) X = (11, 27)
102
      E9BS81
                         (1, 3, 5, 7, 8, 24, 25, 27, 28, 29, 30, 31) X = (0, 10, 12, 20)
103
      EAOQNT
104
                 F = \Pi (30, 28, 27, 26, 25, 24, 19, 18, 17, 16, 14, 13, 12, 9, 7, 5) X = (10, 8)
      EAS1AA
                         (1, 2, 5, 6, 9, 10, 13, 14, 20, 21, 28, 30, 31) X = (22, 23, 29)
105
      EB0CLZ
106
                 F = \Pi (27, 26, 25, 24, 22, 21, 20, 15, 13, 11, 9, 7, 5, 3, 1) X = (28, 23, 19, 17, 10)
      ECGQP3
107
      EEUA54
                         (0, 1, 3, 4, 5, 7, 16, 19, 23, 24, 25, 27, 29, 31) X = (26, 30)
                 F = \Sigma
108
      EGGFRA
                 F = \Pi (30, 28, 27, 24, 23, 22, 20, 19, 18, 16, 13, 9, 6, 5, 3, 1) X = (31, 26, 11, 7)
                         (1, 3, 9, 11, 16, 20, 21, 23, 28, 29, 30, 31) X = (0, 12, 18, 24)
109
      EGZ9A5
110
                 F = \Pi (31, 30, 27, 25, 23, 22, 19, 17, 13, 12, 11, 9, 5, 4, 3, 1) X = (16, 10, 8)
      EHGRGO
                         (0, 1, 2, 5, 7, 8, 10, 15, 18, 19, 23, 26, 27, 31) X = (21, 29)
111
      EJ7LHI
112
                 F = \Sigma
                         (3, 4, 6, 12, 14, 15, 18, 23, 26, 27) X = (5, 7, 9, 11, 19, 31)
      ELVS69
113
                 F = \Pi (31, 30, 28, 27, 26, 24, 23, 20, 19, 16, 15, 14, 12, 10, 9, 8) X = (13, 11, 6, 5, 3, 0)
      EPB5JY
114
      EPGCUY
                 F = \Pi (31, 29, 27, 25, 23, 20, 15, 14, 13, 12, 10, 8, 7, 6, 5, 4) X = (22, 21, 18, 17, 3, 0)
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sz Neptun kód
                                                               Függvény
                 F = \Pi (30, 29, 28, 26, 24, 21, 19, 14, 13, 12, 10, 8, 7, 6, 5, 3) X = (20, 4)
      EOGN66
116
                         (0, 2, 4, 8, 9, 10, 11, 13, 15, 20, 28, 29, 30, 31) X = (21, 23)
                         (1, 3, 6, 9, 11, 14, 15, 16, 18, 22, 24, 26, 31) X = (7, 23, 30)
117
      ETF3AQ
118
      EX909A
                         (1, 3, 5, 7, 8, 10, 12, 14, 20, 21, 22, 30, 31) X = (23, 28, 29)
119
                 F = \Pi (30, 28, 26, 25, 24, 19, 17, 15, 14, 13, 12, 9, 7, 6, 5, 4) X = (10, 8)
      EXLZGW
120
      EXNDHU
                         (2, 5, 6, 10, 13, 14, 15, 16, 20, 21, 24, 28, 31) X = (7, 23, 29)
121
                         (2, 10, 11, 15, 16, 17, 20, 21, 26, 27, 30, 31) X = (0, 3, 6, 9)
      EXXRA9
122
                 F = \Pi (31, 29, 27, 25, 23, 22, 21, 20, 18, 16, 15, 12, 7, 6, 5, 4) X = (14, 13, 10, 9, 3, 0)
      F16PGR
123
                 F = \Pi (28, 26, 24, 23, 22, 21, 20, 15, 13, 12, 11, 9, 7, 5, 3, 1) X = (6, 4)
      F1LVZU
124
      F23IKH
                         (3, 6, 14, 15, 16, 18, 23, 24, 26, 27) X = (7, 9, 11, 17, 19, 31)
125
                F = \Pi (31, 29, 26, 24, 23, 22, 19, 18, 15, 13, 10, 8, 7, 6, 3, 2) X = (20, 16, 1)
      F2G7P4
                 F = \Sigma (0, 1, 4, 9, 16, 18, 19, 20, 22, 23, 25, 27, 29, 31) X = (11, 15)
126
      F2XSCL
      F4WUJN
                 F = \Pi (30, 28, 26, 25, 24, 21, 17, 15, 14, 12, 11, 10, 8, 7, 3) X = (29, 19, 13, 9, 6)
127
128
      F7P5F0
                F = \Sigma
                         (3, 6, 8, 10, 15, 19, 23, 24, 26, 30) X = (7, 12, 14, 20, 22, 31)
129
                 F = \Pi (29, 27, 26, 25, 24, 22, 21, 19, 18, 17, 16, 14, 13, 6, 5) X = (30, 28, 20, 9, 7)
      FBGGEE
130
      FF9HFL
                F = \Pi (28, 27, 26, 25, 24, 23, 21, 19, 18, 17, 16, 14, 12, 7, 5) X = (30, 22, 20, 13, 3)
                         (1, 3, 5, 7, 10, 14, 18, 23, 27, 30) X = (17, 19, 20, 22, 26, 31)
131
                F = \Sigma
      FFQA06
132
      FG3WFB
                 F = \Pi (30, 26, 25, 24, 22, 21, 18, 17, 15, 14, 13, 11, 10, 9, 6, 2) X = (12, 8)
                 F = \Pi (31, 30, 27, 26, 23, 22, 21, 20, 13, 12, 9, 8, 7, 6, 5, 4) X = (16, 3, 1)
133
      FH025B
134
      FK74LQ
                F = \Sigma
                         (0, 2, 8, 9, 11, 15, 25, 27, 28, 29, 30, 31) X = (10, 13, 16, 20, 22)
                 F = \Pi (30, 26, 25, 24, 23, 22, 21, 19, 18, 17, 14, 13, 10, 9, 6, 2) X = (20, 16)
135
      FM8KS5
                         (0, 2, 8, 12, 14, 15, 25, 27, 28, 29, 30, 31) X = (10, 13, 16, 17, 19)
136
      FMH61P
137
                 F = \Sigma (6, 8, 9, 10, 11, 15, 18, 19, 23, 30) X = (5, 7, 12, 14, 22, 31)
      FOD94Z
      FOTG98
138
                 F = \Pi (31, 30, 29, 25, 24, 23, 22, 21, 17, 16, 15, 13, 9, 5, 3, 1) X = (12, 11, 10, 7, 6, 0)
139
      FQD6R0
                 F = \Pi (31, 29, 28, 27, 25, 24, 23, 21, 20, 18, 17, 16, 15, 12, 11, 8) X = (22, 19, 6, 5, 3, 0)
140
                F = \Pi (31, 30, 27, 26, 25, 24, 21, 20, 19, 18, 17, 16, 15, 14, 5, 4) X = (8, 3, 1)
      FQPG76
141
                F = \Pi (31, 29, 27, 25, 23, 20, 15, 14, 13, 12, 10, 8, 7, 6, 5, 4) X = (22, 21, 18, 17, 3, 0)
      FQWQQ4
                 F = \Pi (31, 29, 27, 25, 22, 20, 18, 16, 15, 14, 11, 10, 7, 6, 3, 2) X = (8, 5, 4)
142
      FSJ5QS
143
                         (0, 1, 3, 8, 11, 12, 13, 15, 16, 24, 27, 28, 29, 31) X = (7, 23)
                F = \Sigma
      FSRQQ0
                         (0, 2, 8, 9, 16, 18, 20, 22, 25, 27, 28, 29, 30, 31) X = (13, 15)
144
      FU0HVI
145
                 F = \Sigma (0, 1, 2, 3, 8, 12, 14, 15, 18, 19, 26, 27, 30, 31) X = (28, 29)
      FUOVF7
146
                F = \Pi (30, 28, 27, 26, 25, 24, 22, 21, 20, 17, 11, 10, 9, 8, 7, 5) X = (18, 16)
      FVPUMK
147
      FVY03H
                F = \Sigma (1, 2, 5, 7, 10, 15, 18, 21, 23, 26, 29, 31) X = (0, 9, 17, 20)
                 F = \Pi (30, 25, 24, 23, 22, 20, 17, 16, 15, 14, 12, 11, 10, 6, 3, 2) X = (31, 28, 21, 7)
148
      FX7M22
149
      FYDHK5
                 |F = \Pi| (29, 27, 26, 25, 21, 19, 18, 17, 14, 13, 9, 7, 6, 5, 1) X = (24, 22, 15, 11, 3)
                         (0, 1, 5, 8, 9, 13, 16, 18, 19, 21, 23, 27, 29, 31) X = (22, 30)
150
      FZPR6E
                         (1, 3, 17, 19, 20, 23, 24, 26, 29, 30) X = (5, 6, 21, 22, 28, 31)
151
      G0HHDH
152
                 F = \Pi (30, 29, 28, 23, 21, 20, 19, 18, 17, 16, 12, 11, 10, 9, 8, 5) X = (31, 22, 14, 13)
      G136SL
                         (0, 1, 4, 11, 15, 17, 21, 23, 25, 27, 29, 31) X = (5, 8, 10, 14, 19)
153
      G2R63H
154
                F = \Pi (30, 27, 25, 24, 21, 20, 15, 14, 11, 10, 9, 8, 6, 5, 4, 3) X = (31, 26, 22, 7)
      G3IYHR
155
                 F = \Pi (28, 27, 25, 22, 20, 19, 17, 15, 14, 11, 10, 7, 6, 3, 2) X = (30, 26, 21, 18, 9)
      G5G27J
                         (0, 2, 4, 5, 7, 8, 12, 13, 15, 18, 22, 23, 30, 31) X = (19, 27)
156
      G6H006
                         (0, 4, 6, 8, 9, 13, 14, 15, 16, 20, 22, 29, 30, 31) X = (11, 27)
157
      G9A38K
                         (4, 5, 8, 10, 13, 15, 21, 23, 24, 26, 29, 31) X = (0, 6, 17, 20)
158
                 F = \Sigma
      GA973F
                 F = \Pi (31, 30, 29, 27, 26, 25, 21, 17, 13, 9, 7, 6, 5, 3, 2, 1) X = (16, 12, 4)
159
      GBTNLV
                 F = \Pi (31, 30, 29, 27, 25, 23, 22, 19, 17, 11, 10, 9, 5, 3, 2, 1) X = (24, 21, 20, 13, 12, 0)
160
      GC58ZH
161
                 F = \Pi (28, 27, 26, 23, 21, 19, 17, 14, 12, 11, 10, 7, 6, 5, 3, 1) X = (18, 2)
      GC8WQ2
                 F = \Pi (28, 25, 24, 23, 21, 19, 17, 15, 14, 11, 10, 9, 7, 6, 3, 2) X = (5, 1)
162
      GD4WCS
163
                 F = \Pi (31, 30, 29, 28, 23, 18, 15, 14, 11, 10, 9, 8, 7, 6, 3, 2) X = (22, 20, 19, 17, 5, 0)
      GDIZOE
                         (2, 3, 18, 19, 20, 23, 24, 25, 29, 30) X = (5, 6, 21, 22, 28, 31)
164
      GDPYU2
165
      GEPTJ6
                 F = \Pi (27, 25, 22, 21, 20, 19, 17, 15, 14, 13, 12, 11, 10, 9, 8, 5) X = (3, 1)
                 F = \Pi (31, 30, 29, 25, 23, 22, 21, 17, 13, 11, 10, 9, 5, 3, 2, 1) X = (16, 12, 8)
166
      GI9VTV
167
                 F = \Pi (30, 27, 26, 24, 21, 20, 17, 16, 15, 11, 10, 9, 7, 6, 3, 2) X = (31, 28, 25, 14)
      GJ2VXO
                 F = \Sigma (0, 2, 3, 11, 14, 15, 16, 19, 23, 27, 30, 31) X = (7, 8, 12, 18, 28)
168
      GKQRFV
                 |F = \Pi| (29, 27, 25, 24, 22, 20, 19, 17, 15, 13, 12, 9, 6, 4, 3, 1) X = (31, 28, 14, 11)
169
      GLAQRP
170
                 F = \Sigma
                         (4, 5, 6, 7, 16, 24, 25, 27, 28, 29, 30, 31) X = (0, 9, 17, 18)
      GLC9GR
171
      GLP263
                F = \Pi (27, 26, 22, 21, 20, 19, 18, 15, 14, 13, 12, 11, 10, 3, 2) X = (28, 23, 9, 7, 6)
```

```
sz Neptun kód
                                                               Függvény
                 F = \Pi (28, 27, 25, 24, 22, 20, 19, 17, 15, 14, 13, 12, 11, 9, 3, 1) X = (10, 8)
      GOLJFM
173
                          (0, 2, 4, 8, 9, 10, 11, 13, 15, 20, 28, 29, 30, 31) X = (21, 23)
      GP6C1I
                 F = \Sigma
174
                 F = \Pi (28, 27, 26, 24, 23, 22, 21, 20, 19, 18, 13, 12, 11, 10, 3, 2) X = (17, 16)
      GPY0Y4
175
                          (2, 3, 6, 7, 12, 15, 20, 21, 29, 30) X = (9, 10, 13, 14, 28, 31)
      GQK9QR
176
                  F = \Pi (31, 29, 27, 23, 20, 19, 15, 14, 13, 12, 10, 7, 6, 5, 4, 2) X = (28, 24, 21, 17, 9, 0)
      GRB9TL
177
       GSBP2A
                  F = \Pi (31, 30, 28, 26, 25, 24, 23, 22, 20, 18, 17, 16, 15, 9, 7, 1) X = (12, 8, 2)
178
                  F = \Pi (30, 27, 26, 21, 20, 18, 17, 16, 15, 14, 13, 12, 10, 9, 8, 6) X = (31, 22, 19, 11)
       GSKIIT
179
                  F = \Pi (31, 30, 29, 26, 22, 19, 18, 17, 15, 14, 13, 10, 6, 3, 2, 1) X = (24, 16, 4)
       GTUR5G
                 F = ∏
180
                          (30, 28, 26, 25, 24, 21, 17, 15, 14, 11, 10, 9, 7, 6, 3, 2) X = (12, 8)
      GWRILD
181
      GX00V8
                          (1, 4, 6, 7, 9, 14, 15, 17, 23, 25, 30, 31) X = (0, 10, 12, 20)
182
                 F = \Sigma
                         (0, 1, 7, 9, 11, 15, 16, 23, 25, 27, 29, 31) X = (2, 6, 13, 17, 22)
      H179R2
                 F = \Sigma (6, 8, 9, 12, 13, 15, 20, 21, 23, 30) X = (3, 7, 10, 14, 22, 31)
183
      H29EZ0
184
       H645SI
                 F = \Pi (30, 29, 28, 26, 24, 20, 19, 17, 15, 13, 12, 10, 8, 5, 3, 1) X = (31, 21, 14, 7)
185
      H8ZSU5
                 F = \Sigma
                          (1, 2, 6, 9, 11, 13, 15, 18, 22, 27, 29, 31) X = (0, 5, 12, 17)
186
                 F = Π
                         (31, 29, 26, 24, 23, 21, 18, 16, 15, 14, 11, 10, 7, 6, 3, 2) X = (9, 8, 4)
      H9430G
187
      H9G6RA
                          (0, 1, 4, 12, 16, 17, 18, 19, 22, 23, 28, 29, 30, 31) X = (14, 15)
                          (2, 3, 10, 11, 12, 15, 24, 25, 29, 30) X = (5, 6, 13, 14, 28, 31)
188
                 F = \Sigma
      HA908N
189
      HC5GSE
                 F = \Sigma
                          (2, 5, 6, 7, 10, 13, 14, 16, 20, 24, 28, 29, 31) X = (15, 21, 23)
190
                 F = \Pi (29, 26, 25, 22, 21, 18, 17, 15, 14, 13, 12, 11, 10, 9, 8) X = (30, 28, 24, 19, 5)
      HCL01V
191
      HGEZZN
                 F = \Pi (30, 29, 28, 25, 24, 22, 21, 20, 19, 17, 16, 14, 11, 6, 3) X = (27, 26, 18, 12, 7)
192
      HH33L4
                 F = \Pi (31, 30, 29, 28, 26, 24, 23, 22, 20, 18, 17, 16, 15, 13, 10, 8) X = (21, 19, 6, 5, 3, 0)
193
      нн39СК
                 F = \Pi (31, 29, 27, 26, 25, 24, 23, 21, 14, 12, 11, 10, 9, 8, 6, 4) X = (18, 2, 1)
194
                 |F = \Pi| (31, 30, 27, 26, 23, 17, 15, 13, 12, 11, 9, 8, 7, 5, 3, 1) X = (21, 20, 19, 18, 6, 0)
      HIS3K0
                          (0, 2, 4, 5, 7, 15, 21, 23, 28, 29, 30, 31) X = (6, 13, 16, 24, 26)
195
      HIUZ52
196
      HN8BQZ
                 F = \Sigma
                          (5, 7, 9, 15, 16, 17, 18, 19, 27, 29) X = (10, 11, 13, 24, 25, 31)
197
                          (0, 2, 8, 12, 13, 14, 15, 25, 27, 29, 30, 31) X = (1, 10, 17, 19, 28)
      HNP96L
                  F = \Sigma
198
      HS6BIM
                 F = \Pi (31, 29, 27, 25, 22, 20, 18, 16, 15, 14, 11, 10, 7, 6, 3, 2) X = (12, 4, 1)
                          (1, 3, 6, 7, 8, 10, 17, 19, 22, 24, 26, 30, 31) X = (14, 15, 23)
199
      HT6GGB
200
                  F = \Pi (31, 30, 27, 25, 21, 20, 19, 17, 15, 14, 11, 9, 5, 4, 3, 1) X = (24, 16, 2)
      HTFAE7
                 F = \Pi (30, 29, 28, 26, 22, 21, 20, 18, 13, 12, 11, 7, 5, 4, 3) X = (24, 19, 15, 14, 6)
201
      HVWTDA
202
                 F = \Sigma (1, 3, 4, 6, 9, 11, 12, 14, 24, 26, 27, 28, 31) X = (25, 29, 30)
      HW39DP
203
                 F = \Pi (30, 29, 26, 24, 23, 22, 21, 20, 18, 16, 11, 9, 6, 5, 3, 1) X = (31, 28, 13, 7)
      HXC9XQ
204
       I0DF8R
                 F = \Pi (31, 29, 27, 24, 23, 19, 15, 14, 13, 12, 11, 10, 9, 8, 6, 2) X = (28, 25, 20, 17, 5, 0)
                          (1, 3, 11, 15, 16, 19, 20, 23, 24, 27, 28, 31) X = (0, 5, 9, 10)
205
       IOLVCW
206
       I102PY
                  F = \Sigma
                          (0, 1, 5, 7, 11, 15, 16, 21, 23, 27, 29, 31) X = (2, 10, 13, 17, 26)
                  F = \Pi (31, 30, 28, 26, 25, 24, 23, 17, 15, 14, 12, 10, 9, 8, 7, 1) X = (20, 16, 2)
207
       I16LHI
208
                 F = \Pi (31, 30, 25, 24, 23, 21, 19, 17, 15, 14, 9, 8, 7, 5, 3, 1) X = (20, 16, 2)
       I314L5
209
                 F = \Sigma (1, 5, 8, 12, 17, 18, 21, 22, 23, 24, 26, 28, 31) X = (19, 27, 30)
       I3TMC9
                         (2, 6, 9, 10, 14, 15, 24, 27, 28, 29) X = (3, 5, 11, 13, 25, 31)
210
       I5MJPH
211
                         (0, 1, 5, 8, 10, 11, 13, 15, 16, 24, 26, 27, 29, 31) X = (7, 23)
       I6QDPQ
212
                          (2, 6, 17, 18, 22, 23, 24, 27, 28, 29) X = (3, 5, 19, 21, 25, 31)
       IAB184
213
                 F = \Sigma (0, 1, 2, 3, 8, 12, 13, 15, 17, 19, 25, 27, 29, 31) X = (28, 30)
       IAWKIX
                          (0, 2, 8, 10, 12, 14, 16, 17, 25, 27, 28, 29, 30, 31) X = (21, 23)
214
       IDICV1
215
                          (2, 3, 10, 11, 16, 20, 22, 23, 28, 29, 30, 31) X = (0, 12, 17, 24)
                 F = \Sigma
       IDJ4SR
                 F = \Pi (30, 29, 22, 20, 19, 17, 15, 14, 13, 12, 10, 9, 6, 4, 3, 1) X = (31, 28, 25, 11)
216
       IE5VBF
217
                 F = \Pi (27, 25, 23, 22, 21, 20, 19, 18, 17, 16, 14, 13, 12, 11, 9, 5) X = (3, 1)
       IEY28B
218
                  F = \Pi (28, 25, 24, 23, 22, 19, 18, 17, 15, 13, 11, 9, 7, 6, 3, 2) X = (5, 1)
       IIHKKU
                          (4, 5, 6, 7, 9, 11, 17, 23, 27, 29) X = (18, 19, 20, 21, 25, 31)
219
       IKBFPM
220
                          (2, 3, 4, 5, 10, 11, 12, 13, 24, 25, 26, 29, 31) X = (27, 28, 30)
       IKBLYH
221
                          (4, 5, 6, 7, 8, 9, 10, 11, 17, 19, 23, 25, 31) X = (21, 27, 29)
       IKXOW5
222
       IOVM0R
                 F = \Pi (29, 28, 26, 24, 23, 22, 21, 20, 19, 18, 13, 12, 11, 10, 5, 4) X = (17, 16)
                          (1, 3, 4, 6, 17, 19, 20, 22, 24, 26, 27, 28, 31) X = (25, 29, 30)
223
       IRFCKB
224
                          (2, 6, 10, 14, 16, 17, 19, 21, 23, 27, 29, 31) X = (0, 5, 20, 24)
       ISGREG
225
                  F = \Sigma (0, 1, 4, 5, 12, 13, 16, 18, 22, 23, 28, 29, 30, 31) X = (26, 27)
       IXDZS5
226
                  F = \Pi (29, 26, 25, 22, 21, 20, 18, 17, 15, 14, 13, 9, 7, 6, 5, 1) X = (12, 4)
       IXOEAJ
227
                  F = \Sigma
                          (0, 1, 2, 4, 6, 9, 11, 15, 18, 19, 22, 23, 27, 31) X = (25, 29)
       IZ790I
228
      J0Q0B0
                 F = \Sigma
                          (0, 4, 8, 9, 16, 18, 20, 22, 25, 26, 27, 29, 30, 31) X = (11, 15)
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```
sz Neptun kód
                                                               Függvény
229
                  F = \Pi (31, 29, 27, 26, 25, 24, 22, 20, 19, 18, 17, 16, 15, 13, 6, 4) X = (8, 3, 2)
       J7RBAP
230
                         (0, 1, 8, 12, 13, 15, 26, 27, 28, 29, 30, 31) X = (9, 14, 16, 18, 19)
      J8003G
                 F = \Sigma
231
                 F = \Pi (31, 29, 28, 27, 25, 24, 22, 21, 20, 18, 17, 16, 15, 11, 6, 2) X = (8, 5, 4)
       JB0I93
                         (1, 3, 4, 7, 11, 12, 15, 20, 23, 27, 28, 31) X = (0, 9, 10, 17)
       JB7AMB
233
                  F = \Pi (31, 30, 25, 24, 23, 21, 19, 17, 15, 14, 9, 8, 7, 5, 3, 1) X = (18, 16, 4)
       JE7QY8
234
       JH562G
                          (0, 1, 16, 18, 19, 23, 26, 27, 28, 29, 30, 31) X = (8, 12, 13, 17, 22)
235
                         (2, 3, 4, 10, 11, 20, 21, 22, 23, 29, 30, 31) X = (0, 5, 12, 17)
       JH5DFH
236
                          (0, 8, 10, 13, 14, 15, 16, 26, 27, 29, 30, 31) X = (4, 5, 11, 21, 24)
       JKAVEI
237
                  F = \Pi (29, 28, 26, 23, 21, 20, 19, 13, 12, 11, 10, 9, 7, 5, 4, 3) X = (17, 1)
       JMES8Q
238
       JSRDZC
                 F = \Pi (30, 27, 26, 24, 21, 20, 19, 18, 15, 14, 12, 10, 5, 4, 3, 2) X = (31, 28, 13, 11)
239
                  F = \Pi (27, 26, 25, 24, 22, 21, 20, 15, 13, 11, 9, 7, 5, 3, 1) X = (28, 23, 19, 17, 10)
      K302LY
      K31K01
240
                 F = \Pi (30, 28, 26, 24, 23, 22, 20, 19, 18, 16, 13, 11, 10, 9, 7, 3) X = (6, 2)
                 F = \Pi (31, 30, 29, 27, 26, 25, 24, 23, 21, 12, 11, 10, 9, 8, 3, 1) X = (28, 20, 18, 14, 6, 0)
241
       K3DLNT
242
      K4NJF1
                  F = \Sigma
                          (8, 9, 12, 13, 16, 18, 22, 23, 26, 27, 30, 31) X = (0, 6, 17, 20)
243
                         (1, 3, 4, 6, 10, 11, 17, 19, 20, 22, 26, 30, 31) X = (14, 15, 27)
      K8PBRS
                 F = \Pi (30, 28, 27, 26, 25, 24, 22, 21, 20, 18, 16, 11, 9, 7, 5) X = (23, 19, 17, 13, 10)
244
      K9SSJC
245
                         (31, 29, 27, 26, 25, 24, 23, 20, 19, 18, 17, 16, 15, 10, 7, 2) X = (28, 21, 12, 9, 5, 0)
                  F = ∏
      KC28ED
246
      KCHT1E
                          (8, 10, 12, 14, 16, 17, 19, 23, 25, 27, 29, 31) X = (0, 3, 18, 20)
247
      KCL9F6
                         (4, 6, 12, 14, 16, 17, 19, 21, 23, 27, 29, 31) X = (0, 3, 18, 24)
248
      KCYAM4
                 F = \Pi (31, 29, 27, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 13, 6, 4) X = (26, 25, 10, 9, 3, 0)
                 F = \Pi (31, 29, 27, 23, 22, 21, 20, 18, 15, 12, 11, 7, 6, 5, 4, 2) X = (28, 24, 17, 13, 9, 0)
249
      KDP1RQ
250
      KDW6W0
                 F = \Pi (31, 29, 27, 25, 23, 22, 19, 18, 14, 12, 10, 8, 7, 6, 3, 2) X = (20, 4, 1)
251
                  F = \Pi (29, 26, 24, 23, 22, 21, 20, 17, 15, 13, 10, 9, 8, 6, 5, 4) X = (31, 25, 11, 7)
      KKUWMW
252
      KMZ9AL
                  F = \Pi (31, 30, 29, 28, 27, 25, 23, 19, 17, 11, 10, 9, 8, 5, 3, 1) X = (21, 20, 18, 7, 6, 0)
253
      KNB71H
                 F = \Pi (31, 29, 27, 26, 25, 24, 23, 21, 14, 12, 11, 10, 9, 8, 6, 4) X = (18, 2, 1)
254
                          (2, 3, 6, 7, 8, 24, 26, 27, 28, 29, 30, 31) X = (0, 9, 12, 20)
      KPFZKG
                  F = \Sigma
255
      KUIVG3
                 F = \Pi (30, 28, 25, 22, 21, 20, 17, 15, 14, 12, 11, 7, 6, 4, 3) X = (29, 19, 13, 10, 5)
      KZV4QK
256
                 F = \Pi (29, 28, 26, 24, 23, 22, 21, 20, 19, 18, 13, 12, 11, 10, 5, 4) X = (17, 16)
                 |F = \Pi| (30, 27, 26, 21, 20, 18, 17, 16, 15, 13, 12, 11, 10, 9, 8, 3) X = (31, 22, 19, 14)
257
      L1UKSO
                         (3, 9, 13, 15, 16, 17, 20, 21, 23, 27) X = (6, 7, 11, 18, 19, 31)
258
      L3C5D9
259
                         (0, 1, 4, 5, 6, 7, 8, 14, 15, 24, 28, 29, 30, 31) X = (26, 27)
      L4V8OV
260
                 F = \Pi (31, 29, 28, 27, 25, 24, 22, 21, 20, 18, 17, 16, 15, 11, 6, 2) X = (12, 4, 1)
      L700RE
261
      LFVD7I
                 F = \Pi (29, 26, 25, 24, 23, 22, 21, 19, 18, 17, 14, 13, 10, 9, 5, 1) X = (20, 16)
                         (0, 8, 16, 18, 19, 21, 23, 26, 27, 29, 30, 31) X = (1, 5, 13, 22, 24)
262
      LJP9PO
263
      LKU0BU
                 F = \Sigma
                         (0, 2, 4, 10, 14, 15, 19, 23, 26, 27, 30, 31) X = (6, 11, 16, 17, 21)
                  F = \Pi (30, 28, 26, 25, 24, 23, 22, 19, 18, 17, 13, 9, 7, 6, 3, 2) X = (20, 16)
264
      LMDEZS
265
                  F = \Pi (28, 27, 24, 23, 20, 19, 18, 16, 15, 13, 11, 10, 9, 5, 3, 1) X = (31, 26, 22, 7)
      LRN8R3
266
                         (1, 9, 13, 15, 16, 18, 20, 22, 25, 27, 29, 31) X = (0, 3, 5, 12)
      LRPC8L
                  F = \Sigma
                         (1, 3, 5, 7, 16, 24, 25, 27, 28, 29, 30, 31) X = (0, 12, 18, 20)
267
      LSIFHX
268
                         (1, 3, 5, 7, 8, 10, 12, 14, 18, 22, 23, 26, 31) X = (19, 27, 30)
      LYV2IV
269
                         (1, 8, 10, 12, 14, 17, 19, 23, 25, 27, 29, 31) X = (0, 3, 5, 18)
      M13788
270
                  F = \Pi (29, 27, 25, 24, 23, 19, 18, 17, 14, 12, 10, 8, 7, 5, 3, 1) X = (31, 28, 26, 21)
      M5HN1Y
271
                         (0, 2, 7, 10, 11, 15, 16, 23, 26, 27, 30, 31) X = (1, 5, 14, 18, 21)
      M9QSIY
272
                 F = \Pi
                         (30, 27, 25, 24, 21, 20, 15, 14, 11, 10, 9, 8, 6, 5, 4, 3) X = (31, 26, 22, 7)
      MLAX65
273
                         (0, 1, 4, 12, 13, 14, 15, 22, 23, 29, 30, 31) X = (2, 5, 18, 19, 28)
      MP3B4T
                 F = \Sigma
                 F = \Pi (29, 26, 24, 23, 22, 21, 20, 17, 15, 13, 10, 9, 8, 6, 5, 4) X = (31, 25, 11, 7)
274
      MUVQ12
275
                         (4, 5, 8, 10, 11, 14, 15, 20, 21, 27, 30, 31) X = (0, 3, 9, 24)
      MX6M4V
                         (31, 29, 28, 27, 22, 21, 20, 18, 15, 13, 12, 11, 6, 5, 4, 2) X = (17, 16, 8)
276
      N25I60
                  F = \Pi
277
                 F = \Sigma
                         (2, 5, 6, 12, 15, 18, 21, 22, 29, 30) X = (10, 13, 14, 24, 28, 31)
      N51F89
                  F = \Pi (29, 28, 25, 24, 22, 20, 19, 18, 15, 14, 13, 12, 9, 8, 7, 6) X = (5, 4)
278
      N7KL86
279
      N7NZEF
                 F = \Pi (31, 30, 27, 25, 23, 22, 19, 17, 13, 12, 11, 9, 5, 4, 3, 1) X = (16, 10, 8)
                 F = \Pi (30, 29, 28, 26, 25, 24, 21, 20, 17, 16, 14, 11, 10, 9, 7, 3) X = (12, 8)
280
      NBHZ90
                         (31, 30, 27, 26, 25, 24, 23, 22, 13, 12, 11, 10, 9, 8, 5, 4) X = (17, 2, 1)
281
                  F = ∏
      NE5PXK
282
                         (0, 1, 4, 12, 13, 15, 22, 23, 28, 29, 30, 31) X = (5, 14, 16, 18, 19)
      NFHLBL
283
                  F = \Sigma
                         (0, 1, 8, 10, 11, 15, 26, 27, 28, 29, 30, 31) X = (9, 14, 16, 20, 21)
      NGSGS8
284
                  F = \Sigma
                          (0, 1, 4, 9, 16, 18, 19, 20, 22, 23, 25, 27, 29, 31) X = (11, 15)
      NH8284
285
      NI4P7R
                 F = \Pi (30, 29, 28, 27, 26, 24, 20, 18, 13, 12, 9, 8, 7, 6, 3, 2) X = (31, 25, 22, 19)
```

```
sz Neptun kód
                                                               Függvény
                  F = \Pi (31, 29, 28, 26, 25, 24, 23, 21, 20, 18, 17, 16, 15, 10, 7, 2) X = (9, 8, 4)
286
      NRW5U9
287
                 F = \Pi (31, 30, 28, 27, 23, 22, 20, 19, 14, 13, 12, 9, 6, 5, 4, 1) X = (16, 10, 8)
288
                          (1, 5, 17, 18, 21, 22, 24, 27, 29, 30) X = (9, 12, 25, 26, 28, 31)
      NTY9Y7
                 F = \Pi (31, 30, 29, 28, 25, 24, 21, 20, 19, 18, 17, 16, 15, 14, 3, 2) X = (8, 5, 1)
      NU6J8Y
290
                          (1, 3, 4, 6, 17, 19, 20, 22, 24, 25, 26, 30, 31) X = (27, 28, 29)
      NUQFIT
291
      NYA90F
                  F = Π
                          (28, 25, 24, 23, 22, 21, 20, 15, 14, 12, 11, 10, 7, 6, 3, 2) X = (5, 4)
292
                 F = \Pi (31, 30, 29, 25, 21, 19, 18, 17, 15, 14, 13, 9, 5, 3, 2, 1) X = (20, 16, 8)
       O1M8U4
293
                          \overline{(31, 30, 29, 28, 27, 25, 19, 17, 11, 9, 7, 6, 5, 4, 3, 1)} X = (16, 10, 2)
       O91UNL
                 F = ∏
294
                          (31, 30, 29, 26, 22, 19, 18, 17, 15, 14, 13, 10, 6, 3, 2, 1) X = (24, 16, 4)
      O9ZMUY
295
       OBGA2G
                 F = \Pi (31, 30, 25, 24, 23, 22, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8) X = (5, 2, 1)
                  F = \Sigma
                          (0, 4, 7, 8, 15, 20, 21, 23, 28, 29, 30, 31) X = (1, 3, 11, 12, 22)
296
       OFIP21
297
       ORPPU1
                 F = \Pi (29, 28, 27, 24, 22, 18, 15, 13, 12, 11, 9, 8, 6, 5, 3, 2) X = (31, 25, 19, 7)
298
       OT8IAS
                 F = \Pi (31, 30, 29, 28, 27, 26, 19, 18, 11, 10, 7, 6, 5, 4, 3, 2) X = (16, 9, 1)
299
       OTL4NA
                 |F = \Pi| (31, 30, 29, 24, 23, 21, 15, 14, 13, 12, 11, 10, 9, 8, 3, 1) X = (28, 26, 20, 18, 6, 0)
300
      OVCJ31
                 F = Π
                          (28, 27, 26, 25, 24, 21, 20, 15, 14, 11, 10, 9, 8, 7, 6) X = (29, 22, 13, 12, 3)
301
       OVVH54
                          (0, 2, 16, 21, 23, 24, 26, 27, 28, 29, 30, 31) X = (4, 5, 7, 18, 25)
302
                          (27, 26, 25, 24, 22, 21, 20, 15, 13, 11, 9, 7, 5, 3, 1) X = (28, 23, 19, 17, 10)
                  F = ∏
       P2TYJS
303
       P3BKAR
                          (0, 1, 2, 13, 15, 17, 19, 23, 25, 27, 29, 31) X = (3, 8, 12, 14, 21)
                          (31, 30, 29, 28, 26, 24, 23, 22, 20, 18, 17, 16, 15, 13, 10, 8) X = (21, 19, 6, 5, 3, 0)
304
       P4ABMT
                  F = \Pi
305
      P4Q24E
                 |F = \Pi| (31, 30, 29, 23, 22, 19, 18, 17, 15, 13, 10, 7, 6, 3, 2, 1) X = (26, 24, 20, 14, 12, 0)
                 F = \Pi (31, 30, 29, 28, 26, 24, 23, 21, 14, 12, 11, 10, 9, 8, 3, 1) X = (16, 6, 2)
306
      P53ZXV
                          (2, 8, 9, 12, 13, 18, 19, 23, 26, 27, 30, 31) X = (0, 3, 6, 17)
307
       P61SVR
308
                          (0, 1, 5, 8, 16, 18, 19, 21, 23, 24, 26, 27, 29, 31) X = (7, 15)
      P7XGVL
                  F = \Sigma
                          (0, 2, 8, 12, 14, 15, 25, 27, 28, 29, 30, 31) X = (10, 13, 16, 17, 19)
309
       PALEQK
310
       PEEPG2
                 F = \Pi (29, 26, 25, 24, 22, 21, 18, 17, 15, 14, 13, 11, 10, 9, 5, 1) X = (12, 8)
                  F = \Pi (30, 27, 26, 24, 21, 20, 19, 18, 15, 14, 12, 10, 5, 4, 3, 2) X = (31, 28, 13, 11)
311
       PGWXNU
312
       PHXRM3
                 F = \Pi (29, 28, 27, 25, 22, 19, 17, 13, 12, 11, 9, 7, 6, 3, 1) X = (24, 23, 21, 14, 5)
                          (0, 1, 2, 6, 7, 8, 10, 14, 15, 17, 19, 23, 27, 31) X = (21, 29)
313
       POJ5PI
                          (0, 2, 6, 8, 9, 11, 14, 15, 16, 24, 25, 27, 30, 31) X = (7, 23)
314
       PZ70GC
                  F = \Sigma
                          (4, 5, 7, 15, 16, 18, 21, 23, 24, 26, 29, 31) X = (0, 3, 6, 12)
315
       Q0Z003
                 F = \Pi (31, 29, 28, 27, 25, 24, 23, 19, 14, 13, 12, 10, 9, 8, 6, 2) X = (20, 4, 1)
316
       Q10I78
317
                 F = \Pi (29, 27, 25, 24, 23, 19, 18, 17, 14, 12, 10, 8, 7, 5, 3, 1) X = (31, 28, 26, 21)
       Q3KSRL
                 F = \Pi (30, 29, 28, 27, 26, 24, 21, 20, 17, 16, 12, 10, 7, 6, 3, 2) X = (31, 25, 14, 11)
318
       Q4ZZ60
                 F = \Pi (31, 30, 29, 27, 25, 23, 22, 19, 18, 10, 7, 6, 5, 3, 2, 1) X = (26, 24, 20, 14, 12, 0)
319
       Q9R29H
320
                 F = \Sigma
                          (1, 3, 8, 12, 13, 15, 17, 19, 28, 29, 30, 31) X = (0, 10, 20, 24)
       QCXYSJ
                 F = \Pi (31, 30, 29, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 3, 2) X = (28, 25, 12, 9, 5, 0)
321
       QJSI55
                         (0, 1, 4, 14, 15, 20, 21, 23, 28, 29, 30, 31) X = (5, 8, 10, 11, 22)
322
       OKILXX
323
                 F = \Pi (29, 28, 25, 24, 22, 19, 18, 15, 13, 11, 9, 7, 5, 3, 1) X = (26, 23, 21, 17, 12)
       QMLGUG
                 F = \Pi (31, 29, 26, 24, 23, 21, 18, 16, 15, 14, 13, 12, 11, 10, 9, 8) X = (4, 3, 2)
324
       QNIA03
                 F = \Pi (31, 28, 27, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 12, 11, 8) X = (6, 4, 1)
325
       QTV6BM
326
                  F = \Pi (31, 30, 29, 28, 27, 26, 24, 22, 20, 18, 17, 16, 15, 13, 6, 4) X = (25, 19, 10, 9, 3, 0)
       QWT0SG
                          (31, 30, 28, 27, 23, 22, 20, 19, 14, 13, 12, 9, 6, 5, 4, 1) X = (16, 10, 8)
327
                 F = Π
       QZHMOM
328
                          (4, 5, 18, 19, 20, 21, 24, 27, 29, 30) X = (9, 12, 25, 26, 28, 31)
       R1VB8I
329
                          (30, 29, 28, 24, 23, 22, 20, 18, 13, 12, 11, 10, 5, 4, 3, 2) X = (31, 26, 21, 19)
                 F = \Pi
      R2RLPM
                  F = \Pi (29, 28, 26, 22, 21, 20, 18, 15, 13, 12, 11, 7, 5, 4, 3) X = (30, 19, 14, 9, 6)
330
      R6MK5I
                          (1, 3, 9, 11, 12, 13, 14, 16, 18, 24, 26, 30, 31) X = (15, 28, 29)
331
      R72CG9
332
                  F = \Pi (31, 30, 27, 23, 20, 19, 15, 14, 13, 12, 9, 7, 6, 5, 4, 1) X = (28, 24, 22, 18, 10, 0)
      R9VP9N
                          (1, 3, 5, 7, 8, 10, 12, 14, 20, 22, 23, 28, 31) X = (21, 29, 30)
333
      RFR95F
334
                         (0, 8, 11, 12, 13, 15, 16, 27, 28, 29, 30, 31) X = (1, 3, 14, 19, 24)
      RKLQNT
335
      RQG7D5
                  |F = \Pi| (28, 27, 24, 23, 20, 19, 18, 16, 15, 13, 11, 10, 9, 5, 3, 1) X = (31, 26, 22, 7)
336
      RRJVCM
                          (5, 8, 10, 12, 14, 15, 20, 22, 23, 29) X = (3, 7, 9, 13, 21, 31)
                 F = \Pi (26, 25, 24, 23, 22, 21, 20, 15, 14, 11, 10, 7, 6, 3, 2) X = (28, 27, 19, 18, 5)
337
      RSFAVU
338
                          (30, 27, 26, 24, 23, 22, 20, 18, 13, 12, 9, 8, 7, 6, 3, 2) X = (31, 28, 25, 19)
      RTJPY1
                          (4, 6, 8, 10, 17, 19, 20, 22, 23, 24, 25, 26, 31) X = (21, 27, 29)
339
       RTT2AN
                 F = \Sigma
                          (1, 3, 7, 15, 16, 19, 20, 23, 24, 27, 28, 31) X = (0, 5, 6, 9)
340
       S21YC0
341
                  F = \Pi (31, 30, 29, 26, 22, 19, 18, 17, 15, 14, 13, 10, 6, 3, 2, 1) X = (20, 16, 8)
       S7SL7R
342
      SAVA4X
                 F = \Pi (31, 30, 29, 26, 23, 22, 21, 18, 14, 11, 10, 9, 6, 3, 2, 1) X = (24, 8, 4)
```

```
sz Neptun kód
                                                               Függvény
                 F = \Pi (29, 27, 23, 21, 20, 19, 18, 17, 14, 12, 11, 9, 6, 4, 3, 1) X = (31, 28, 25, 22)
      SBG4ZK
344
                         (31, 30, 29, 27, 26, 25, 24, 23, 22, 12, 11, 10, 9, 8, 3, 2) X = (28, 20, 17, 13, 5, 0)
      SE9FL6
                 lF = Π
345
                 F = \Pi (29, 28, 26, 21, 20, 19, 18, 17, 15, 13, 12, 11, 7, 5, 4, 3) X = (9, 1)
      SF0THA
346
                 F = \Pi (31, 30, 29, 28, 27, 23, 21, 20, 19, 13, 12, 9, 6, 5, 4, 1) X = (24, 22, 18, 14, 10, 0)
       SJPC1L
                 F = \Pi
                         (30, 26, 25, 22, 21, 20, 18, 17, 15, 14, 13, 10, 7, 6, 5, 2) X = (12, 4)
347
      SO8SN5
                          (0, 4, 16, 18, 19, 22, 23, 25, 27, 29, 30, 31) X = (1, 9, 13, 20, 26)
348
       SS3E9V
349
                         (0, 1, 2, 3, 5, 7, 16, 21, 23, 24, 25, 27, 29, 31) X = (28, 30)
       ST05Z8
350
                          (2, 6, 7, 8, 9, 14, 15, 23, 24, 25, 30, 31) X = (0, 3, 5, 18)
      SW36BJ
351
                         (30, 28, 25, 23, 22, 19, 18, 14, 12, 11, 9, 7, 6, 3, 2) X = (27, 26, 20, 13, 10)
      SYBZT7
352
       SZF6RX
                         (31, 30, 29, 27, 26, 25, 22, 18, 14, 10, 7, 6, 5, 3, 2, 1) X = (16, 12, 4)
                 |F = \Pi| (31, 29, 28, 26, 25, 24, 23, 18, 15, 13, 12, 10, 9, 8, 7, 2) X = (20, 16, 1)
353
      T4TTA9
                         (0, 4, 6, 8, 9, 13, 14, 15, 16, 20, 22, 29, 30, 31) X = (11, 27)
354
      TCUBSK
                 F = \Pi (31, 30, 25, 24, 23, 22, 17, 16, 15, 13, 11, 9, 7, 5, 3, 1) X = (12, 8, 2)
355
       TD1406
356
      TD157R
                 F = \Pi (31, 30, 29, 27, 26, 25, 24, 23, 22, 12, 11, 10, 9, 8, 3, 2) X = (28, 20, 17, 13, 5, 0)
357
                         (1, 5, 8, 10, 13, 15, 21, 23, 24, 26, 29, 31) X = (0, 3, 17, 20)
      TFPXE6
358
       TI9C8I
                         (2, 3, 8, 12, 13, 14, 15, 18, 19, 29, 30, 31) X = (0, 5, 9, 24)
                 F = \Pi (30, 29, 27, 26, 25, 24, 18, 17, 13, 12, 9, 8, 7, 6, 3, 2) X = (31, 28, 22, 19)
359
      TUNFUM
360
      U0M2ZD
                          (0, 1, 2, 6, 7, 8, 9, 15, 17, 19, 23, 25, 27, 31) X = (22, 30)
361
      U6RC1S
                         (0, 1, 3, 4, 7, 8, 9, 11, 15, 20, 21, 23, 29, 31) X = (22, 30)
362
      U7HD8A
                 F = \Sigma
                         (4, 12, 14, 15, 16, 17, 18, 19, 28, 29, 30, 31) X = (0, 5, 6, 10)
                 F = \Pi (31, 29, 28, 27, 25, 24, 23, 20, 15, 13, 12, 10, 9, 8, 7, 4) X = (26, 18, 17, 11, 3, 0)
363
      U997UP
364
      UDIILI
                         (4, 5, 7, 15, 16, 18, 21, 23, 24, 26, 29, 31) X = (0, 3, 6, 12)
365
                 F = \Pi (31, 29, 27, 25, 22, 20, 18, 16, 15, 14, 11, 10, 7, 6, 3, 2) X = (8, 5, 4)
      UG98A0
                         (31, 29, 28, 26, 25, 24, 23, 21, 20, 18, 17, 16, 15, 10, 7, 2) X = (12, 8, 1)
366
      ULM2ME
                 F = \Pi
367
      USCUAX
                 F = \Sigma
                         (4, 5, 10, 11, 12, 13, 14, 16, 17, 24, 25, 27, 31) X = (15, 26, 30)
368
                         (29, 27, 25, 22, 20, 18, 17, 16, 15, 14, 12, 11, 10, 9, 8, 3) X = (31, 21, 19, 13)
      UXMUEK
                 F = \Pi
369
      UZ65Q9
                 F = Π
                         (30, 25, 24, 23, 21, 20, 15, 14, 10, 9, 8, 7, 6, 5, 4, 3) X = (31, 26, 22, 11)
370
      V107DH
                 F = \Pi
                         (28, 25, 24, 23, 22, 19, 18, 15, 13, 11, 9, 7, 5, 3, 1) X = (29, 26, 21, 17, 6)
                         (9, 12, 14, 15, 16, 18, 24, 26, 27, 29) X = (3, 11, 13, 17, 25, 31)
371
      V22ZPV
                 F = \Sigma
                         (1, 4, 6, 7, 9, 15, 17, 22, 23, 25, 30, 31) X = (0, 12, 18, 20)
372
      VCUHQT
373
                 F = \Pi (31, 30, 29, 28, 26, 24, 23, 21, 14, 12, 11, 10, 9, 8, 3, 1) X = (18, 4, 2)
      VKP0H3
374
                 F = \Sigma
                         (4, 5, 6, 7, 9, 11, 13, 16, 17, 18, 19, 27, 31) X = (15, 25, 29)
      VN3CC6
375
      VNTXVN
                 F = \Pi (28, 26, 24, 23, 22, 19, 18, 15, 13, 11, 9, 7, 6, 3, 2) X = (30, 25, 14, 10, 5)
                         (0, 1, 2, 3, 9, 11, 16, 20, 21, 23, 25, 27, 29, 31) X = (28, 30)
376
      VOQHNO
377
      VPB6GB
                 F = \Pi (30, 28, 27, 26, 25, 24, 22, 20, 18, 16, 13, 12, 11, 9, 7, 5) X = (10, 8)
                         (4, 9, 10, 12, 15, 20, 26, 27, 28, 29) X = (5, 11, 13, 17, 25, 31)
378
      VS74R2
                         (1, 2, 5, 6, 17, 18, 21, 22, 24, 26, 28, 29, 31) X = (25, 27, 30)
379
      VTFI2R
380
                 F = \Pi (30, 26, 25, 22, 19, 18, 17, 15, 14, 13, 12, 7, 6, 5, 4, 3) X = (10, 2)
      WB40WY
                         (0, 2, 4, 12, 16, 17, 18, 19, 21, 23, 28, 29, 30, 31) X = (13, 15)
381
      WBY5B9
                         (0, 2, 4, 6, 8, 9, 13, 15, 20, 22, 28, 29, 30, 31) X = (25, 27)
382
      WCB0ZV
383
      WEK1K8
                 F = \Pi (30, 29, 26, 24, 19, 17, 15, 14, 13, 12, 10, 8, 6, 5, 3, 1) X = (31, 28, 21, 7)
                         (4, 5, 12, 13, 16, 18, 22, 23, 26, 27, 30, 31) X = (0, 10, 17, 24)
384
      WEOPER
385
                         (2, 6, 14, 15, 16, 17, 22, 23, 24, 25, 30, 31) X = (0, 3, 10, 12)
      WF0KAY
386
                         (31, 30, 29, 27, 26, 23, 21, 19, 17, 9, 7, 6, 5, 3, 2, 1) X = (25, 24, 20, 13, 12, 0)
      WFEATV
387
      WKC905
                 F = ∏
                         (30, 28, 26, 24, 21, 19, 17, 15, 14, 11, 10, 7, 6, 3, 2) X = (25, 23, 22, 18, 12)
                 F = \Pi (29, 28, 25, 24, 23, 21, 20, 19, 17, 16, 14, 11, 10, 9, 7, 3) X = (5, 1)
388
      WKDRYE
389
                 F = \Pi (31, 29, 27, 26, 25, 24, 23, 20, 19, 18, 17, 16, 15, 10, 7, 2) X = (28, 21, 12, 9, 5, 0)
      WM53DA
                          (3, 4, 5, 8, 9, 11, 19, 20, 21, 23, 24, 25, 31) X = (7, 15, 27)
390
      WNVYOW
391
                         (1, 4, 6, 9, 13, 15, 20, 22, 25, 27, 29, 31) X = (0, 3, 17, 24)
      W01X05
                          (3, 4, 5, 7, 8, 9, 19, 20, 21, 24, 25, 27, 31) X = (11, 15, 23)
392
      WO2BCF
393
      WZAGXO
                         (0, 2, 8, 9, 16, 18, 20, 22, 25, 27, 28, 29, 30, 31) X = (13, 15)
                 F = \Pi (31, 30, 28, 26, 25, 24, 23, 22, 20, 18, 17, 16, 15, 9, 7, 1) X = (12, 8, 2)
394
      WZE66M
395
                          (0, 1, 4, 11, 15, 17, 19, 21, 23, 27, 29, 31) X = (2, 5, 10, 14, 25)
      WZXJPO
                 F = \Pi (30, 28, 22, 21, 20, 19, 17, 15, 14, 13, 12, 11, 9, 6, 4) X = (25, 23, 10, 7, 5)
396
      X03YQD
                 F = \Sigma
                         (0, 4, 5, 8, 12, 13, 16, 18, 21, 22, 23, 29, 30, 31) X = (19, 27)
397
      X6WH05
398
                 F = \Pi
                         (28, 27, 25, 22, 20, 19, 17, 15, 14, 11, 10, 7, 6, 3, 2) X = (30, 26, 21, 18, 9)
      X7DAMB
399
      XAWPFY
                 F = \Sigma
                         (0, 2, 4, 5, 7, 13, 15, 23, 28, 29, 30, 31) X = (6, 8, 21, 24, 26)
```

SZ	Neptun kód	Függvény
400	XCK220	$F = \Sigma$ (8, 9, 13, 15, 16, 18, 20, 22, 25, 27, 29, 31) $X = (0, 5, 10, 12)$
401	XFGMAR	$F = \Pi$ (29, 26, 25, 21, 19, 18, 17, 15, 14, 13, 9, 7, 6, 5, 1) $X = (27, 22, 12, 11, 3)$
402	XGIOMA	$F = \Sigma$ (9, 11, 12, 15, 16, 18, 24, 26, 29, 30) $X = (6, 13, 14, 20, 28, 31)$
403	XHDBGZ	$F = \Pi$ (31, 29, 28, 26, 25, 24, 23, 18, 15, 13, 12, 10, 9, 8, 7, 2) $X = (20, 16, 1)$
404	XHIOFM	$F = \Pi$ (30, 29, 28, 26, 24, 22, 21, 20, 18, 16, 13, 11, 7, 6, 5, 3) $X = (12, 4)$
405	XI4CR3	$F = \Sigma$ (0, 4, 5, 8, 13, 15, 21, 22, 23, 29, 30, 31) $X = (7, 12, 16, 18, 26)$
406	XMQCTI	$F = \Pi$ (28, 27, 25, 22, 20, 19, 18, 17, 15, 14, 11, 9, 7, 6, 3, 1) $X = (10, 2)$
407		$F = \Pi$ (28, 25, 24, 23, 22, 21, 20, 15, 14, 12, 11, 10, 7, 6, 3, 2) $X = (5, 4)$
408		$F = \Sigma$ (2, 3, 5, 9, 15, 18, 19, 23, 25, 29) $X = (6, 7, 13, 20, 21, 31)$
409		$F = \Pi$ (28, 27, 25, 21, 20, 19, 17, 15, 14, 11, 10, 7, 6, 5, 3, 2) $X = (9, 1)$
410		$F = \Sigma$ (0, 4, 8, 10, 14, 15, 25, 26, 27, 29, 30, 31) $X = (11, 12, 16, 17, 21)$
411		$F = \Sigma$ (1, 2, 5, 6, 9, 10, 13, 14, 20, 22, 28, 29, 31) $X = (21, 23, 30)$
412		$F = \Pi$ (28, 27, 24, 23, 22, 18, 15, 12, 11, 9, 8, 7, 6, 5, 3, 2) $X = (31, 25, 19, 13)$
413		$F = \Sigma$ (2, 3, 8, 11, 12, 15, 19, 23, 24, 27, 28, 31) $X = (0, 6, 17, 18)$
414		$F = \Pi$ (29, 28, 27, 25, 22, 19, 17, 13, 12, 11, 9, 7, 6, 3, 1) $X = (24, 23, 21, 14, 5)$
415		$F = \Sigma$ (0, 2, 4, 12, 14, 15, 21, 23, 28, 29, 30, 31) $X = (6, 13, 16, 17, 19)$
416		$F = \Pi$ (28, 25, 24, 23, 22, 19, 18, 15, 14, 13, 12, 7, 6, 5, 4) $X = (29, 26, 21, 20, 3)$
417		$F = \Sigma$ (1, 9, 10, 12, 15, 17, 25, 26, 29, 30) $X = (5, 13, 14, 20, 28, 31)$
418		$F = \Pi$ (29, 28, 26, 21, 20, 19, 18, 15, 13, 11, 9, 7, 5, 3, 1) $X = (27, 25, 22, 17, 12)$
419		$F = \Sigma$ (0, 1, 8, 10, 16, 17, 20, 21, 26, 27, 28, 29, 30, 31) $X = (14, 15)$
420		$F = \Sigma$ (1, 3, 5, 7, 12, 15, 20, 22, 29, 30) $X = (9, 10, 13, 14, 28, 31)$
421		$F = \Pi$ (31, 30, 27, 26, 23, 20, 15, 14, 13, 12, 9, 8, 7, 6, 5, 4) $X = (22, 21, 18, 17, 3, 0)$
422		$F = \Sigma$ (8, 9, 11, 15, 16, 18, 20, 22, 25, 27, 29, 31) $X = (0, 3, 10, 12)$
423		$F = \Sigma$ (4, 5, 13, 15, 16, 18, 21, 23, 24, 26, 29, 31) $X = (0, 6, 9, 12)$
424		$F = \Pi$ (31, 28, 27, 24, 23, 22, 21, 20, 15, 12, 11, 8, 7, 6, 5, 4) $X = (18, 16, 1)$
425		$F = \Sigma$ (3, 4, 6, 11, 12, 14, 15, 16, 18, 19, 24, 26, 31) $X = (7, 23, 27)$
426		$F = \Sigma$ (0, 2, 4, 12, 13, 14, 15, 21, 23, 29, 30, 31) $X = (1, 6, 17, 19, 28)$
427		$F = \Pi$ (28, 27, 26, 25, 24, 22, 20, 15, 13, 12, 11, 9, 7, 5, 3, 1) $X = (10, 8)$
428		$F = \Sigma$ (0, 1, 4, 5, 6, 7, 16, 22, 23, 24, 28, 29, 30, 31) $X = (26, 27)$
429		$F = \Pi$ (30, 26, 25, 23, 22, 21, 20, 14, 11, 10, 9, 7, 6, 5, 4, 3) $X = (18, 2)$
430	ZYUBA0	$F = \Sigma$ (1, 2, 5, 6, 9, 10, 13, 14, 24, 26, 28, 29, 31) $X = (25, 27, 30)$