

```

1  #include <stdio.h>
2
3  #define N                25
4  #define ONE              1
5  #define BOOLEAN         unsigned short
6  #define ABS(x)           (x) * (((2 * (x)) + 1) % 2)
7  #define ZERO             0
8
9  //-----
10 //                                     NumBBiggerThenNumA
11 //                                     -----
12 //
13 // General      : Checks if the second number (B) is greater than the first number (A).
14 //
15 // Parameters   :
16 //     number1 - first number (int)
17 //     number2 - second number (int)
18 //
19 // Return value : If the second number (B) is greater than the first number (A) (BOOLEAN).
20 //
21 //-----
22 // Programmer : Cohen Idan
23 // Student No : None
24 // Date      : 21.10.2019
25 //-----
26 BOOLEAN NumBBiggerThenNumA(int a, int b)
27 {
28     int sub = a - b + ONE;
29     BOOLEAN answer = (ONE / (ABS(sub) + (sub) + ONE));
30     answer;
31 }
32
33 //-----
34 //                                     Exercise 5
35 //                                     -----
36 //
37 // General : The program checks if the tool can move in other rule.
38 //
39 // Input  : 25 numbers, index of player(number), cube result(number).
40 //
41 // Process : The program checks the place and the dice roll
42 //           and then it checks if it has to go back or can go forward.
43 //
44 // Output  : The new place of the tool on the board according to the
45 //           cube roll (unsigned short).
46 //
47 //-----
48 // Programmer : Cohen Idan
49 // Student No : 211675038
50 // Date      : 23.10.2019
51 //-----
52 void main(void)
53 {
54     unsigned short board[N] = { ZERO },
55                     start_index_player,
56                     cube_result,
57                     end_player_index,
58                     counter,
59                     input;
60
61     (counter = ZERO; counter < N; counter++)
62     {
63         printf("Enter number for index %ud on borad : ", counter);
64         scanf("%ud", &input);
65     }
66
67     printf("Enter index of player: ");
68     scanf("%ud", &start_index_player);
69
70     printf("Enter cube result: ");
71     scanf("%ud", &cube_result);
72

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73     end_player_index = start_index_player + ONE;
74
75     end_player_index -= NumBBiggerThenNumA(board[end_player_index],
76                                           cube_result) * (cube_result + ONE);
77
78     printf("%hd\n", end_player_index);
79
80 }
```