

Shubham_ACSL_Patolli.py

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1  #Created by Shubham Bhatnagar, ACSL Junior Division 2020
2
3  output = []
4  file = open("test-jr.txt","r")
5  for line in file.readlines():
6      line = line.rstrip()
7      gameInput = line.split(" ")
8      for i in range(len(gameInput)):
9          gameInput[i] = int(gameInput[i])
10     occupied = gameInput[:3]
11     placement = gameInput[3]
12     rolls = gameInput[5:]
13     primes = [2,3,5,7,11,13,17,19,23,29,31,37,41,43,47]
14     squares = [9,16,25,36,49]
15     Rule9Spots = [[6,8],[11,13],[16,18],[21,23],[26,28],[34,36],[39,41],[44,46],[49,51]]
16     print(rolls)
17     for roll in rolls:
18         print(placement)
19         if (roll + placement) in occupied:
20             print(roll+placement,"is occupied")
21             continue
22         else:
23             if (roll + placement) > 52:
24                 continue
25             else:
26                 placement += roll
27
28         if placement in primes:
29             for spot in range(placement,placement+7):
30                 if (spot + 1) in occupied:
31                     placement = spot
32                     break
33                 if spot == placement + 6:
34                     placement = spot
35                     break
36             print("prime to",placement)
37         elif placement in squares:
38             for spot in range(placement,placement-7,-1):
39                 if (spot - 1) in occupied:
40                     placement = spot
41                     break
42                 if spot == placement - 6:
43                     placement = spot
44                     break
45             print("square to",placement)
46         else:
47             found9 = False
48             for spots in Rule9Spots:
49                 if placement >= spots[1] and (placement - roll) <= spots[0]:
50                     found9 = True
51             if found9 == True:
52                 foundApp = False
53                 for spot in range(placement-roll+1,placement+1):
54                     if spot%roll == 0 and spot not in occupied:
55                         placement = spot
56                         foundApp = True
57                         break
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58         if foundApp == False:
59             placement = placement - roll
60             print("rule 9 to",placement)
61     if placement == 52:
62         placement = "GAME OVER"
63     output.append(placement)
64 print("_____")
65 for i in output:
66     print(i)
67
```