Eval

List of challenges

elect category:

Easy (18)

Moderate (21)

Hard (21)

« Back to list

Grid Walk

Description:

There is a monkey which can walk around on a planar grid. The monkey can move one space at a time left, right, up or down. That is, from (x, y) the monkey can go to (x+1, y), (x-1, y), (x, y+1), and (x, y-1). Points where the sum of the digits of the absolute value of the x coordinate plus the sum of the digits of the absolute value of the y coordinate are lesser than or equal to 19 are accessible to the monkey. For example, the point (59, 79) is inaccessible because 5 + 9 + 7 + 9 = 30, which is greater than 19. Another example: the point (-5, -7) is accessible because abs(-5) + abs(-7) = 5 + 7 = 12, which is less than 19. How many points can the monkey access if it starts at (0, 0), including (0, 0) itself?

Input sample:

There is no input for this program.

Output sample:

Print out the how many points can the monkey access. (The number should be printed as an integer whole number eg. if the answer is 10 (its not !!), print out 10, not 10.0 or 10.00 etc)

Submit your solution in a file **(some file name).(py| c| cpp| rb| pl| php| tcl| clj| js| scala| cs| m) | grid_walk.java|grid_walk.scala** or use the online editor.

Sponsored Challenge Eligibility

In order to be eligible to push solution to the employer (BitTorrent), you must satisfy the following conditions:

Location: United States,Canada
Minimum Education: High School
Your email / resume will always be sent to the employer