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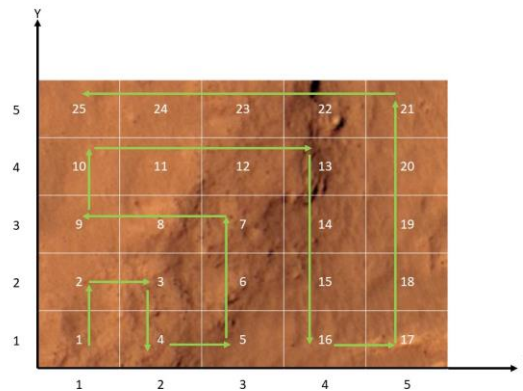
Mars Rover

8 points

Introduction

A new Mars rover is being developed to travel autonomously on the surface of Mars. To test its navigation, you prepared a $N \times N$ board where N represents the number of cells. The rover must move around all the cells. The navigation algorithm of the Mars rover will always start the move at cell (1,1). First, it moves up to the next cell, then a cell to the right, then a cell downward. At this point, it then moves one cell to the right, next two cells upward, and continues the move two cells to the left. This pattern will continue until the whole board is discovered. To keep things simple just assume a constant speed of one grid per second.

Let's see a graphical example with a 5 x 5 board:



Given this navigation strategy it is easy to predict the time spent to arrive at the target position (x,y) . When rover is at (2,3), the rover took 8 seconds. And when it was at (5,4), the rover was at the 20th second of the movement.

Your task will be to compute the time spent to reach a given position (x,y) . Please assume that N could be as large as 4096.

Input

The input is formed by two lines reporting the position in the board:

First line has a single positive integer for the x position.

Second line has a single positive integer for the y position.



Output

The output is the number of seconds to reach the given input position.

Example 1

Input

2

3

Output

8

Example 2

Input

5

4

Output

20