A robot on an infinite grid starts at point (0, 0) and faces north.  The robot can receive one of three possible types of commands:

* -2: turn left 90 degrees
* -1: turn right 90 degrees
* 1 <= x <= 9: move forward x units

Some of the grid squares are obstacles.

The i-th obstacle is at grid point (obstacles[i][0], obstacles[i][1])

If the robot would try to move onto them, the robot stays on the previous grid square instead (but still continues following the rest of the route.)

Return the **square** of the maximum Euclidean distance that the robot will be from the origin.

**Example 1:**

**Input:** commands = [4,-1,3], obstacles = []

**Output:** 25

Explanation: robot will go to (3, 4)

**Example 2:**

**Input:** commands = [4,-1,4,-2,4], obstacles = [[2,4]]

**Output:** 65

**Explanation**: robot will be stuck at (1, 4) before turning left and going to (1, 8)

**Note:**

1. 0 <= commands.length <= 10000
2. 0 <= obstacles.length <= 10000
3. -30000 <= obstacle[i][0] <= 30000
4. -30000 <= obstacle[i][1] <= 30000
5. The answer is guaranteed to be less than 2 ^ 31.