

Nishant goes Green! (20 Points)

ZPRAC-16-17-Lab3

Nishant owns a large mansion and decides to plant a tree in his circular garden. He tells his gardener, Rohan to think of a suitable location for the same. But he fears that Rohan being the absent minded person he is, will select an incorrect location. Worried about the future of his tree, he comes to you for help. Given diametrically opposite points in the garden and the point proposed by Rohan. You need to decide whether the point lies inside, on or outside the garden.

Input: The input consists of three points, $-1000 \leq x_1, y_1, x_2, y_2, x_3, y_3 \leq 1000$. The first two points refer to two diametrically opposite points of the garden. The last point is the proposed point by Rohan.

Output: "Inside" if the point lies inside the garden

"On the boundary" if it lies on the boundary of the garden

"Outside" if it lies outside the garden

Example:

Input:

0 0 6 0 2 1

Output:

Inside