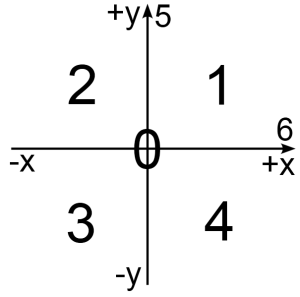
# Telerik Software Academy – C# Fundamentals Part 1 – Sample Exam

## Problem 1 – Cartesian Coordinate System

You are given a two-dimensional Cartesian coordinate system and the two coordinates (**X** and **Y**) of a point in the coordinate system. If you don't know what Cartesian coordinate system is Google it with Bing. As you will find, the coordinate system is divided by 2 lines (see the picture bellow) which divide the plain in four parts. Each of these parts has a lot of points that are numbered between 1 and 4. There is one point where our lines are crossing. This point has the following coordinates: X=0 and Y=0. As a result this point is numbered 0. The points on the lines are also numbered with the numbers 5 and 6 (again see the picture below).

Your task is to write a program that finds the number of the location of the given point in the coordinate system.



### Input

Input data is being read from the console.

The number **X** is on the first input line.

The number **Y** is on the second input line.

The input data will always be valid and in the format described. There is no need to check it explicitly.

### Output

The output data must be printed on the console.

On the only output line you must print an integer number between 0 and 6, depending on the location of the given point in the coordinate system.

### Constraints

* The numbers **X** and **Y** are numbers between -2 000 000 000 001 337 and 2 000 000 000 001 337, inclusive.
* Allowed working time for your program: 0.25 seconds.
* Allowed memory: 16 MB.

### Examples

|  |  |
| --- | --- |
| **Input Example** | **Output Example** |
| 1  2 | 1 |
| -3  -4 | 3 |
| -3000  9000 | 2 |
| 12345  -98786543 | 4 |
| 1337  0 | 6 |