

TCSS141A - SPRING 2021 - TEST #1 - 4/26/2021 - max 20 points

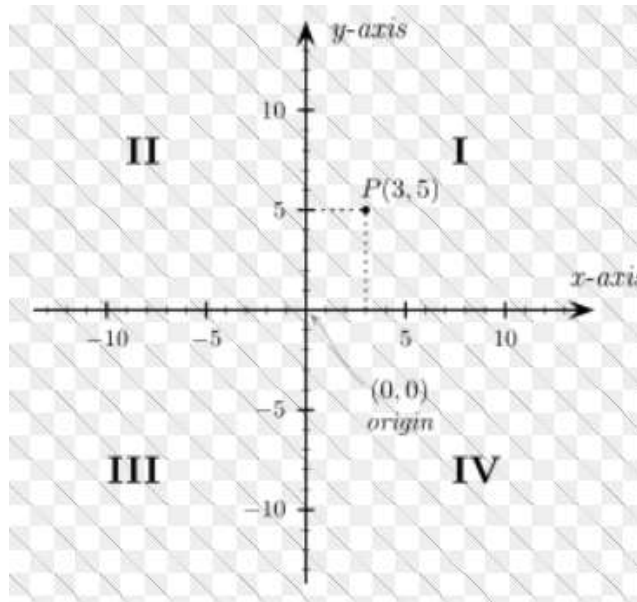
IMPORTANT INFORMATION - READ CAREFULLY:

- SUBMIT YOUR WORK TO THE CANVAS BEFORE THE DUE TIME.
- THE NAME OF THE FILE: yourlastname\_T1.py.
- Start your program with: # your name.
  
- IN THE PROGRAM YOU CAN USE ONLY METHODS AND TOOLS INTRODUCED IN THIS COURSE BEFORE THIS TEST. PROGRAMS OR PARTS OF PROGRAMS WHICH ARE NOT USING SUCH METHODS OR TOOLS WILL GET NO CREDIT FOR YOUR SCORE.
  
- ACADEMIC HONESTY
  - DURING THE TEST YOUR CAMERA HAS TO BE ON.
  - THE SUBMITTED PROGRAM HAS TO BE CREATED BY YOU; YOU CANNOT USE ANY ON-LINE OR OTHER PERSON HELP TO CREATE THE PROGRAM.

### Problem: Points and Quadrants

A plane is divided by axes  $x$  and  $y$  to four quadrants (see the picture below).

Quadrants:



Write a program that prompts a user to enter two coordinates  $x$  and  $y$  of a point  $P$  (as two inputs). Then the program displays info about the position of the point  $P$  in a plane with respect to the number of a quadrant (I, II, III, or IV), or  $x,y$ -axis, or the origin.

The displayed information has to be in the form provided in an example (see the next page).

The user can enter coordinates of multiple points, the user provides the number of points at the beginning.

At the end the program displays the "Thank you for using my program!"

**Example of a possible output:**

This program displays positions of the entered points.

How many points do you want to provide? 5

The point # 1 :

Enter the x coordinate of the point P: -1.2

Enter the y coordinate of the point P: 3.4

The point ( -1.2 , 3.4 ) is in the quadrant II.

The point # 2 :

Enter the x coordinate of the point P: 1.1

Enter the y coordinate of the point P: .7

The point ( 1.1 , 0.7 ) is in the quadrant I.

The point # 3 :

Enter the x coordinate of the point P: 0

Enter the y coordinate of the point P: 0

The point ( 0.0 , 0.0 ) is the origin.

The point # 4 :

Enter the x coordinate of the point P: -3.2

Enter the y coordinate of the point P: 0

|

The point ( -3.2 , 0.0 ) is on the axis x.

The point # 5 :

Enter the x coordinate of the point P: 0

Enter the y coordinate of the point P: 2.1

The point ( 0.0 , 2.1 ) is on the axis y.

Thank you for using my program!

>>>