## Assignment 2 (CS141, 2021-2022)

Practice Problems (You need not submit solutions):

1. Write a python program that takes an integer number as input, and output its absolute value. Let x be the number given as input. If  $x \ge 0$ , output x. If x < 0, output -x. In Python, there is a function abs() that returns the absolute value of a number x, when you call abs(x). You should try to write this program without using abs().

## Problems to Submit:

1. For this problem, you will take a rectangle  $\mathcal{R}_1$  in the 2-dimensional plane as input by specifying the coordinates of the upper right corner and the bottom left corner points of the rectangle. You will take another rectangle  $\mathcal{R}_2$  in the 2-dimensional plane as input again by specifying the coordinates of the upper right corner and the bottom left corner points of the rectangle. The objective of the program is to figure out whether these two rectangles overlap or not. Print 'The rectangles overlap' if they do, else print 'The rectangles don't overlap'.

Name your submission as Assgn2-YourRollNo.py and upload the .py file in the google classroom.