Intro to Python

Homework 2

Problem 1

Write a program that takes in two (x,y) coordinates as inputs and prints out the distance between the points in the following format:

The distance between (a,b) and (c,d) is x.

Then calculate the distance between the points (2,7) and (5,3).

Hint: The distance formula is $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$.

Problem 2

Write a program that prompts the user to enter the side of a pentagon and displays the area. The area of a pentagon can be computed using the following formula (s is the length of a side):

$$Area = \frac{5 \times s^2}{4 \times tan(\frac{\pi}{5})}$$

Problem 3

Write a program that displays the following table:

a	b	a**b
1	2	1
2	3	8
3	4	81

Problem 4

a. Write a program that receives an ASCII code (an integer between 0 and 127) and displays its character. For example, if the user enters 97, the program displays the character a.

b. Write a program to display Greek letters $\alpha\beta\gamma\delta\epsilon\zeta\eta\theta$