

**AMERICAN INTERNATIONAL UNIVERSITY BANGLADESH
FACULTY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE
C PROBLEMS**

Functions:

1. Take an integer input and pass it to function and print it's value.
2. Take an character input and pass it to function and print it's value.
3. Take the coordinates of two points from user in main function and create a function called distance() which will calculate the distance between these two points and will print the result in main function.

Hint: Distance between two points P1(x1,y1) and P2(x2,y2) is

$$\sqrt{(x1 - x2)^2 + (y1 - y2)^2}$$

4. Create the following three functions:

- i) Area_of_triangle
- ii) Area_of_Rectangle
- iii) Area_of_Circle

Now, in the main function create a menu that will ask the user which area s/he wants to calculate and depending on the user choice call the appropriate function.

Sample Input	Sample Output
Press 1 for Triangle Press 2 for Rectangle Press 3 for Circle Which Area you want to calculate: 1 Enter the height of the triangle: 3 Enter the base of the triangle: 4	Area of the triangle: 6
Press 1 for Triangle Press 2 for Rectangle Press 3 for Circle Which Area you want to calculate: 3 Enter the radius of the circle: 3	Area of the circle: 28.274

Hint:

Area of a triangle=1/2*height*width

Area of a rectangle=height*width

Area of a circle: 3.1416*r²