**LAB1\_VARIABLES AND OPERATORS\_ANP-C7281 AND ANP-C7374**

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**1.Calculate the area of a circle.**

**PROGRAM :**

import math

radius = float(input("Enter the radius of the circle: "))

area = math.pi \* radius \*\* 2

print("The area of the circle with radius", radius, "is:", area)

**OUTPUT :**

Enter the radius of the circle: 3

The area of the circle with radius 3.0 is: 28.274333882308138

**2.     Calculate the area of a triangle.**

**PROGRAM :**

base = float(input("Enter the length of the base of the triangle: "))

height = float(input("Enter the height of the triangle: "))

area = 0.5 \* base \* height

print("The area of the triangle with base", base, "and height", height, "is:", area)

**OUTPUT :**

Enter the length of the base of the triangle: 5

Enter the height of the triangle: 4

The area of the triangle with base 5.0 and height 4.0 is: 10.0

**3. Calculate the area of a rectangle.**

**PROGRAM**

length = float(input("Enter the length of the rectangle: "))

width = float(input("Enter the width of the rectangle: "))

area = length \* width

print("The area of the rectangle with length", length, "and width", width, "is:", area)

**OUTPUT :**

Enter the length of the rectangle: 3

Enter the width of the rectangle: 8

The area of the rectangle with length 3.0 and width 8.0 is: 24.0

**4.     Calculate the area of a square**

**PROGRAM :**

side\_length = float(input("Enter the side length of the square: "))

area = side\_length \*\* 2

print("The area of the square with side length", side\_length, "is:", area)

**OUTPUT :**

Enter the side length of the square: 5

The area of the square with side length 5.0 is: 25.0