**NATIONAL INSTITUTE OF TECHNOLOGY**

**KURUKSHETRA**



**PRACTICAL FILE**

**SUBJECT :-** **Programming Using Python**

**BRANCH :- CS-A-01**

**ROLL NO :- 12112003**

**Submitted to:-**

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**Experiment-2**

1. Write a program that prompts the user to enter the length, from the center of Pentagon to a vertex and computes the area of the Pentagon.

The formula for computing the area of a Pentagon is:

Area = (3\*root(3)\*s^2)/2

where s is the length of a side. The side can be computed using the formula:

s = 2\*r\*sin(3.14/5), where r is the length from the center of a Pentagon to a vertex.

import math

r=int(input("Enter the length, from the center of Pentagon to a vertex : "))

side=2\*r\*math.sin(3.14/5)

area=3\*math.sqrt(3)\*side\*side/2

print("Area of pentagon is ",area)

OUTPUT



1. The area of a Pentagon can be computed using the following formula(s is the length of a side)

Area = (5\*s^2)/(4\*tan(3.14/5))

Write a program that prompts the user to enter the side of a Pentagon and displays the area.

import math

side=int(input("Enter the side of a Pentagon : "))

area=5\*side\*side/(4\*math.tan(3.14/5))

print("Area of pentagon is ",area)

OUTPUT



1. (Reverse number) Write a program that prompts the user to enter a four-digit integer and display the number in reverse order.

n = int(input("Enter an integer : "))

ans = 0

while (n > 0):

    ans = ans\*10+n % 10

    n = n//10

print("Reverse of the Entered Integer is ", ans)

OUTPUT



1. (Turtle: draw the Olympic symbol) Write a program that prompts the user to enter the radius of the rings and draws an Olymoic symbol of five rings of the same size with the colors blue, black, red, yellow, and green.

import turtle

turtle.speed(10)

turtle.width(5)

turtle.color('black')

turtle.circle(50)

turtle.penup()

turtle.goto(110, 0)

turtle.pendown()

turtle.color('red')

turtle.circle(50)

turtle.penup()

turtle.goto(-110, 0)

turtle.pendown()

turtle.color('blue')

turtle.circle(50)

turtle.penup()

turtle.goto(-55, -60)

turtle.pendown()

turtle.color('yellow')

turtle.circle(50)

turtle.penup()

turtle.goto(55, -60)

turtle.pendown()

turtle.color('green')

turtle.circle(50)

turtle.exitonclick()

OUTPUT

