**PROGRAMS USING FUNCTIONS**

**EX NO:5 FIND THE EXPONENT OF A NUMBER USING FUNCTION**

**DATE:18.012023**

**PROGRAM:**

def power(n,e):

if e==0:

return1

elif e==1:

return n

else:

return(n\*power(n,e-1))

n=int(input("enter a number:"))

p=int(input("enter a number:"))

print(power(n,p))

**OUTPUT:**

enter a number:5

enter a number:3

125

**EX NO:5 CONVERT KM TO MILES AND PRINT BOTH THE DATA**

**DATE:18.01.2023**

**PROGRAM:**

def kilometer\_1(km):

conversion\_ratio\_1=0.621371

miles\_1=km\*conversion\_ratio\_1

print("the speed value of car in miles:",miles\_1)

km=float(input("enter the speed of car in kilometer as a unit:"))

kilometer\_1(km)

**OUTPUT:**

enter the speed of car in kilometer as a unit:7

the speed value of car in miles: 4.349597

**EX NO:5 CALCULATE THE AREA/PERIMETER OF CONE USING FUNCTIONS**

**DATE:18.01.23**

**PROGRAM:**

def cone\_lsa(r,l):

lsa=3.14\*r\*l

print("lateral surface area:",lsa)

def cone\_tsa(r,l):

tsa=3.14\*r\*(r+l)

print("total surface area:",tsa)

def cone\_perimeter(r):

perimeter=2\*3.14\*r

print("perimeter of cone:",perimeter)

l=int(input("enter a number:"))

r=int(input("enter a number:"))

cone\_lsa(r,l)

cone\_tsa(r,l)

cone\_perimeter(r)

**OUTPUT:**

enter a number:5

enter a number:6

lateral surface area: 94.2

total surface area: 207.24

perimeter of cone: 37.68