PROGRAMS BASED ON FUNCTIONS

1.factorial of a number

CODING:

def factorial(n):

OUTPUT:

Enter a number: 5

The factorial of 5 is 120

if n == 1:

return n

else:

return n\*factorial(n-1)

num = int(input("Enter a number: "))

if num < 0:

print("Factorial does not exist for negative numbers")

elif num == 0:

print("The factorial of 0 is 1")

else:

print("The factorial of",num,"is",factorial(num))

2.maximum in a list

CODING:

def maximum(list):

OUTPUT:

enter no. of elements in list:4

enter elements:7

enter elements:8

enter elements:9

enter elements:10

[7, 8, 9, 10]

largest number is; 10

return max(list)

list=[]

n=int(input("enter no. of elements in list:"))

for i in range(0,n):

d=int(input("enter elements:"))

list.append(d)

print(list)

print("largest number is;",maximum(list))

3. area and perimeter of circle

CODING:

OUTPUT:

circle

enter the radius14

area 615.44

perimeter 87.92

print("circle")

def cir(r):

print("area",3.14\*r\*r)

print("perimeter",2\*3.14\*r)

return

a=float(input("enter the radius"))

cir(a)

4. Return the full name of the Person( first name, last name) using function

CODING:

def name(fname,lname):

OUTPUT:

Input your First Name : ARJUN

Input your Last Name : VARMA

fullname: ARJUNVARMA

return fname+lname

fname = input("Input your First Name : ")

lname = input("Input your Last Name : ")

print("fullname:",name(fname,lname))

5. write a python program to convert time hours into minutes

CODING:

def conversion(hours):

OUTPUT:

Enter the value of hours: 3

There are 180.0 minutes in 3.0 hours

There are 10800.0 seconds in 3.0 hours

minutes = hours \* 60;

seconds = hours \* 3600;

print("There are " , minutes , " minutes in " , hours , " hours");

print("There are " , seconds , " seconds in " , hours , " hours");

hours = float(input('Enter the value of hours: '))

conversion(hours);