VISHAKHA H (PYTHON DAY 3 ASSESMENT)

1. def factorial(n):

If(n==1 or n==0):

return 1

else:

return (n\*factorial(n-1))

1. import math

def factorial(n):

return (math.factorial(n))

1. def calculate\_area(name):

if name==”rectangle”:

l=int(input(“enter the length of rectangle:”))

b=int(input(“enter the bredth of rectangle))

rect\_area=l\*b

print(“the area of the rectangle is {rect\_area}:”)

elif name==”square”:

s=int(input(“enter the side length of the square:”)

sqt\_area=s\*s

print(“the area of the square is {sqt\_area}:”)

else name=”triangle:”

h=int(input(“enter the height of the triangle”:)

b=int(input(“enter the bredth of the triangle”:)

tri\_area=0.5\*b\*h

print( the area of the triangle is{tri\_area}”)

1. multiple inheritance:

class class 1:

def m(self):

print(“in class1”)

class class2(class1):

def m(self):

print(“in class2”)

class class3(class1,class2):

pass

obj=Class4()

obj.m(0)

multilevel inheritance:

class Family:

def show\_family(self):

print(“this is our family:”)

class Father(Family):

fathername=””

def show\_father(self):

print(self.fathername)

class Mother(Family):

mothername=””

def show\_mother(self):

class son(Father,Mother):

def show\_parent(self):

print(“Father:”,self.fathername)

print(“mother:”,self.mothername)

s1= Son()

s1.fathername=”abc”

s1.mothername=”xyz”

s1.show\_family()

s1.show\_parent()

1. num=int(input(“enter the value of n:”))

hold=num

sum=0

if num<=0:

print(“enter a whole positive number”)

else:

while num>0:

sum=sum+num

num=num-1;

print(“sum of first”,hold,”natural numbers is:”,sum)