***PROGRAMMING LAB***

***ASSIGNMENT NO 1***

***NAME: SHERALI***

***ROLLNUMBER: P21-8024***

***QUESTION1:***

***INPUT:***

import math

a=int(input("Enter one side of right triangle"))

b=int(input("Enter second side of right triangle"))

def hypotenous(x=1,y=1):

from math import sqrt

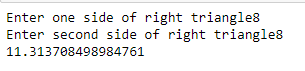
hyp=sqrt(a\*\*2 + b\*\*2)

return hyp

hypotenous\_of\_triangle=hypotenous(x,y)

print(hypotenous\_of\_triangle)

***OUTPUT:***



***QUESTION 2:***

***INPUT:***

x=int(input("Enter any number"))

y=int(input("Enter any number"))

z=int(input("Enter any number"))

if x%2 != 0 and x>y and x>z:

print(x,"is the greatest odd number among them")

elif y%2 != 0 and y>z and y>x:

print(Y,"is the greatest odd number among them")

elif z%2 != 0 and z>y and z>x:

print(z,"is the greatest odd number among them")

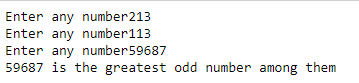
elif x%2 == 0 and y%2 == 0 and z%2==0:

print(even)

else:

print(None is odd)

***OUTPUT:***



***QUESTION3:***

***INPUT:***

x=int(input("Enter any number"))

def isleap():

if x%4 == 0:

print(x, "is the leap year")

elif x%400 == 0:

print(x, "is the leap year")

elif x%100 != 0:

print(x, "is not the leap year")

else:

print(x, "is not leap year")

return isleap

year=isleap()

print(year,"is leap year")

***OUTPUT:***



***QUESTION 4:***

***INPUT:***

classes= []

grades = []

def collect():

i = 0

while (i <=2):

credit\_hours = input("Enter Credit hours of each subject: ")

classes.append(credit\_hours)

i = i +1

print(classes)

y = 0

while (y <=2):

grade = input("Enter Your Grade For Each Class Listed in Order (Letter Form): ")

grade = grade.upper()

grades.append(grade)

y = y + 1

calculate()

def calculate():

total= 0

for element in grades:

if element == "A+":

total = total + 4.0

elif element == "A":

total = total + 4.0

elif element == "A-":

total = total + 3.7

elif element == "B+":

total = total + 3.3

elif element == "B":

total = total + 3.0

elif element == "B-":

total = total + 2.7

elif element == "C+":

total = total + 2.3

elif element == "C":

total = total + 2.0

elif element == "C-":

gpa = total / 3

print(gpa)

collect()

collect()

***OUTPUT:***

