PYTHON ASSIGNMENT

1. Write Python Program(WPP) to enter length and breadth of a rectangle and calculate area and perimeter of the rectangle.

* PROGRAM:

length=int(input(“Enter the length: “))

breadth=int(input(“Enter the breadth: “))

area = length \* breadth

perimeter =2 \* ( length + breadth )

print (“Area is “,’area’)

print (“Perimeter is “,’perimeter’)

OUTPUT:

Enter the length:2

Enter the bradth:2

Area is 4.00

Perimeter is 8.00

1. WPP to enter radius of circle and calculate area and circumference of circle.

* PROGRAM:

PI=3.14

r=float(input(“Enter the radius: “))

area = PI \* ( r \* r )

print (“Area is “,’area’)

print (“Circumference is “,’circ’)

OUTPUT:

Enter the radius:2

Area is 12.56

Circumference is 12.56

1. WPP to enter value in centimetre and convert it to meter and kilometre.

* PROGRAM:

cm=float(input(“Enter length in centimetre: “)

cm\_in\_km = cm \* 0.01 \* 0.001

cm\_in\_m = cm \* 0.01

print (“The centimetre is “,cm\_in\_m,” in meter &”,cm\_in\_km,” in kilometre “)

OUTPUT:

Enter length in centimetre: 50

The centimetre is 0.5 in meter & 0.0005 in kilometre.

1. WPP to enter value in Celsius and convert it to farhenient.

* PROGRAM:

celsius=float(input(“Enter the value of Celsius:”))

farhenient=(Celsius+1.8)+32

Print (“Farhenient is “,farhenient)

OUTPUT:

Enter the value of Celsius: 2

Farhenient is 35.8

1. WPP to enter the value in days and convert in form of years,month and days.

* PROGRAM:

N=int(raw\_input(“Enter the no. of days: “))

Y = N / 365

X = N // 365

Z = Y / 12

A = Y // 12

print (“Year is “,Y)

print (“Months are “,Z)

print(“Remaining days are “,A)

OUTPUT:

Enter the no. of days : 500

Year is 1

Months are 11

Days are 25

1. WPP to find power of any number in form of x^y where x and y are user input.

* PROGRAM:

x=int(input(“Enter the value of x: “))

y=int(input(“Enter the value of y: “))

ans = x\*\*y

print (“ x^y is %d”,%ans)

OUTPUT:

Enter the value of x:2

Enter the value of y:2

X^y is 4.00

1. WPP to enter 2 angles and using function thirdangle(angle1,angle2) calculate third angle.

* PROGRAM:

def thirdangle(a1,a2):

a3=180-a1-a2

print (“Third angle is “,a3)

x=int(input(“First angle: “))

y=int(input(“Second angle: “))

thirdangle(a1=x,a2=y)

OUTPUT:

First angle:45

Second angle:45

Third angle:90

1. WPP to enter base and height of triangle and calculate area of triangle.

* PROGRAM:

base=float(input(“Enter the value: “))

height=float(input(“Enter the value: “))

area = 0.5 \* base \* height

print (“The area of triangle is %f”,%area)

OUTPUT:

Enter the value:2

Enter the value:2

The area of ttriangle is 4.00

1. WPP to enter marks of 5 subjects and find the mean of 5 subjects,calculate percentage. If percentage is less then 35 then print fail else print pass.

* PROGRAM:

NASM=float(input(“Enter the marks: “))

OOAD=float(input(“Enter the marks: “))

DBMS=float(input(“Enter the marks: “))

MI=float(input(“Enter the marks: “))

CO=float(input(“Enter the marks: “))

mean = ( NASM + OOAD + DBMS + MI + CO ) / 5

percentage = ( mean ) \* 100

print (“Mean is %d”,%mean)

print (“Percentage is %d”,%percentage)

if percentage<35 :

print “FAIL”

else:

print “PASS”

OUTPUT:

Enter the marks:67

Enter the marks:98

Enter the marks:87

Enter the marks:80

Enter the marks:94

Mean is 85.20

Percentage is 85.20

PASS

1. WPP to enter principle amount,time,interest rate.Create simple\_interest(principle,time,rate) function to calculate simple\_interest.

* PROGRAM :

p=float(raw\_input(“Enter principle:”))

i=float (raw\_input(“Enter the percentage of interest rate: “))

t=float(raw\_input(“Enter time (in years): “))

def simple\_interest(principle,rate,time):

I=p\*t\*(i/100)

print “Intereast is “,I

simple\_interest(principle=p,rate=r,time=t)

OUTPUT:

Enter principle:1000

Enter the percentage of interest rate:12

Enter time:2

Interest is 240

1. WPP to enter principle amount,time,interest rate.Create compound\_interest (principle,time,rate) function to calculate compound\_interest.

* PROGRAM:

p=float(raw\_input(“Enter principle:”))

i=float (raw\_input(“Enter the percentage of interest rate: “))

t=float(raw\_input(“Enter time (in years): “))

n=float(input(“Enter no. Of times interest is compounded: “))

def compound\_interest(principle,rate,time,node):

A = p \* ( (i+r)/n) \*\* (n\*t) )

print “Intereast is “,A

compound\_interest(principle=p,rate=r,time=t,node=n)

OUTPUT:

Enter principle:1000

Enter the percentage of interest rate:0.5

Enter time:1

Enter no. Of times interest is compounded:2

Interest is 1562.5

1. WPP that accepts an integer (n) and computes the value of n+nn+nnn.

Sample value of n is 5

Expected Result : 615

* PROGRAM:

n=int(input(“Enter the value of n: “))

print (“The value of n is %d”,%n)

o = ( n \* 10 ) + n

p = ( n \* 100 ) + ( n \* 10 ) + n

q = n + o + p

print q

OUTPUT:

Enter the value of n:5

The value of n is 5.

615

1. WPP to find the whether a given number(accept from user) is even or odd, print out an appropriate message to user.

* PROGRAM:

N=float(raw\_input(“Enter the number: “))  
print (“The number is %f.”,%N)

if ( N // 2) :

print “ The given no. is even.”

else:

print “The given no. is odd.”

OUTPUT:

Enter the number:6

The number is 6.

The given no. is even.