**Python Programming Assignment-2**

1. **Write a Python program to convert kilometers to miles?**

# Taking kilometers input from the user

kilometers = float(input("Enter value in kilometers: "))

# conversion factor

conv\_fac = 0.621371

# calculate miles

miles = kilometers \* conv\_fac

print('%0.2f kilometers is equal to %0.2f miles' %(kilometers,miles))

1. **Write a Python program to convert Celsius to Fahrenheit?**

celsius\_1 = float(input("Temperature value in degree Celsius: " ))

Fahrenheit\_1 = (celsius\_1 \* 1.8) + 32

print('The %.2f degree Celsius is equal to: %.2f Fahrenheit' %(celsius\_1, Fahrenheit\_1))

1. **Write a Python program to display calendar?**

import calendar

yy = 2021 # year

mm = 10 # month

print(calendar.month(yy, mm))

1. **Write a Python program to solve quadratic equation?**

import math

# function for finding roots

def equationroots( a, b, c):

# calculating discriminant using formula

dis = b \* b - 4 \* a \* c

sqrt\_val = math.sqrt(abs(dis))

# checking condition for discriminant

if dis > 0:

print(" real and different roots ")

print((-b + sqrt\_val)/(2 \* a))

print((-b - sqrt\_val)/(2 \* a))

elif dis == 0:

print(" real and same roots")

print(-b / (2 \* a))

# when discriminant is less than 0

else:

print("Complex Roots")

print(- b / (2 \* a), " + i", sqrt\_val)

print(- b / (2 \* a), " - i", sqrt\_val)

# Driver Program

a = 1

b = 10

c = -24

# If a is 0, then incorrect equation

if a == 0:

print("Input correct quadratic equation")

else:

equationroots(a, b, c)

1. **Write a Python program to swap two variables without temp variable?**

x = 5

y = 7

print ("Before swapping: ")

print("Value of x : ", x, " and y : ", y)

# code to swap 'x' and 'y'

x, y = y, x

print ("After swapping: ")

print("Value of x : ", x, " and y : ", y)