**PROGRAMMING PYTHON ASSIGNMENT – 2**

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

**Sol.**

km = 6

miles = km/1.60934

print("For {}km equivalent distance in miles = {}".format(km, miles))

Output:

For 6km equivalent distance in miles = 3.7282364198988405

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

**Sol.**

c = 35

f = (9\*c/5)+32

print("For Celsius = {} equivalent Fahrenheit = {}".format(c, f))

Output:

For Celsius = 35 equivalent Fahrenheit = 95.0

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

**Sol.**

year = 2022

print(calendar.calendar(year))

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

**Sol.**

import math

print("ax^2 + bx^1 + c = 0")

print("Enter the coeff a, b and constant c")

a = int(input(("Enter the coeff a: ")))

b = int(input(("Enter the coeff b: ")))

c = int(input(("Enter the constant c: ")))

d = (b\*\*2) - (4\*a\*c)

root1 = ((-1\*b)+(math.sqrt(d))) / (2\*a)

root2 = ((-1\*b)-(math.sqrt(d))) / (2\*a)

print('\nFor quad eq. {}x^2 + ({})x^1 + {}'.format(a,b,c))

print('The solutions are: {} and {}'.format(root1, root2))

Output:

ax^2 + bx^1 + c = 0

Enter the coeff a, b and constant c

Enter the coeff a: 1

Enter the coeff b: -9

Enter the constant c: 14

For quad eq. 1x^2 + (-9)x^1 + 14

The solutions are: 7.0 and 2.0

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

**Sol.**

var1 = 6

var2 = 4

print('Before swap:\nvar1 = {} and var2 = {}'.format(var1, var2))

var2 = var1 + var2

var1 = var2 - var1

var2 = var2 - var1

print('\nAfter swap:\nvar1 = {} and var2 = {}'.format(var1, var2))

Output:

Before swap:

var1 = 6 and var2 = 4

After swap:

var1 = 4 and var2 = 6