**Assignment - 2**

Q1. Write a Python program to convert kilometers to miles?

Sol.

import math

def km\_to\_miles(kilometers):

miles = kilometers \* 0.621371

return miles

# Test the function

kilometers = 10

miles = km\_to\_miles(kilometers)

print(f"{kilometers} kilometers is equal to {miles} miles.")

Q2. Write a Python program to convert Celsius to Fahrenheit?

Sol.

def celsius\_to\_fahrenheit(celsius):

fahrenheit = (celsius \* 9/5) + 32

return fahrenheit

celsius = float(input("Enter temperature in Celsius: "))

fahrenheit = celsius\_to\_fahrenheit(celsius)

print("Temperature in Fahrenheit:", fahrenheit)

Q3. Write a Python program to display calendar?

Sol. # import module

import calendar

year = 2023

month = 4

# display the calendar

print(calendar.month(year, month))

Q4. Write a Python program to solve quadratic equation?

Sol.

# import complex math module

import cmath

a = 1

b = 4

c = 2

# calculating the discriminant

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

# find two results

ans1 = (-b-cmath.sqrt(dis))/(2 \* a)

ans2 = (-b + cmath.sqrt(dis))/(2 \* a)

# printing the results

print('The roots are')

print(ans1)

print(ans2)

Q5. Write a Python program to swap two variables without temp variable?

Sol.

x = 10

y = 25

x = x + y

y = x – y

x = x – y

print(x,y)