1)Write a Python program to convert Kilometers to Miles ?

def kmToMiles():

kiloMeters = float(input("Enter no of kilometers : "))

print("{} km is Equal to {} miles".format(kiloMeters,kiloMeters\*0.621))

kmToMiles()

Enter no of kilometers : 1

1.0 km is Equal to 0.621 miles

2.Write a Python program to convert Celsius to Farenheit ?

def celToFarh():

celsius = int(input("Enter temperature in celsius : "))

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

print("{}° Celsius is Equal to {}° Farenheit".format(celsius,Fahrenheit))

celToFarh()

Enter temperature in celsius : 100

100° Celsius is Equal to 212.0° Fahrenheit

3.Write a Python program to display calender ?

import calendar

def showCalender():

year = int(input("Enter calender year: "))

print(calendar.calendar(year))

showCalender()

Enter calender year: 2021

2021

January February March

Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su

1 2 3 1 2 3 4 5 6 7 1 2 3 4 5 6 7

4 5 6 7 8 9 10 8 9 10 11 12 13 14 8 9 10 11 12 13 14

11 12 13 14 15 16 17 15 16 17 18 19 20 21 15 16 17 18 19 20 21

18 19 20 21 22 23 24 22 23 24 25 26 27 28 22 23 24 25 26 27 28

25 26 27 28 29 30 31 29 30 31

April May June

Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su

1 2 3 4 1 2 1 2 3 4 5 6

5 6 7 8 9 10 11 3 4 5 6 7 8 9 7 8 9 10 11 12 13

12 13 14 15 16 17 18 10 11 12 13 14 15 16 14 15 16 17 18 19 20

19 20 21 22 23 24 25 17 18 19 20 21 22 23 21 22 23 24 25 26 27

26 27 28 29 30 24 25 26 27 28 29 30 28 29 30

31

July August September

Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su

1 2 3 4 1 1 2 3 4 5

5 6 7 8 9 10 11 2 3 4 5 6 7 8 6 7 8 9 10 11 12

12 13 14 15 16 17 18 9 10 11 12 13 14 15 13 14 15 16 17 18 19

19 20 21 22 23 24 25 16 17 18 19 20 21 22 20 21 22 23 24 25 26

26 27 28 29 30 31 23 24 25 26 27 28 29 27 28 29 30

30 31

October November December

Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su

1 2 3 1 2 3 4 5 6 7 1 2 3 4 5

4 5 6 7 8 9 10 8 9 10 11 12 13 14 6 7 8 9 10 11 12

11 12 13 14 15 16 17 15 16 17 18 19 20 21 13 14 15 16 17 18 19

18 19 20 21 22 23 24 22 23 24 25 26 27 28 20 21 22 23 24 25 26

25 26 27 28 29 30 31 29 30 27 28 29 30 31

4.Write a Python program to solve quadratic equation ?

import cmath

import math

def quadarticEquationRoots(a,b,c):

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

if discriminant == 0:

r1 = -b/2\*a

r2 = -b/2\*a

print("Roots are Real",r1,r2)

elif discriminant > 0:

r1 = (-b-math.sqrt(discriminant))/(2 \* a)

r2 = (-b+math.sqrt(discriminant))/(2 \* a)

print("Roots are Real and different",r1,r2)

else:

r1 = (-b-cmath.sqrt(discriminant))/(2 \* a)

r2 = (-b+cmath.sqrt(discriminant))/(2 \* a)

print("Roots are Imaginary",r1,r2)

a = int(input('Enter a value: '))

b = int(input('Enter b value: '))

c = int(input('Enter c value: '))

quadarticEquationRoots(a,b,c)

Enter a value: 1

Enter b value: 2

Enter c value: 1

Roots are Real -1.0 -1.0

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

num\_1 = int(input('Enter first number: '))

num\_2 = int(input('Enter second number: '))

def swapNumbers(num\_1,num\_2):

print('Before Swapping',num\_1,num\_2)

num\_1 = num\_1+num\_2

num\_2 = num\_1-num\_2

num\_1 = num\_1-num\_2

print('before Swapping',num\_1,num\_2)

swapNumbers(num\_1,num\_2)

Enter first number: 15

Enter second number: 30

Before Swapping 15 30

before Swapping 30 15