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

Ans.

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

conv\_fac = 0.621371

miles = kilometers \* conv\_fac

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

OUTPUT:

Enter value in kilometers: 10

10.00 kilometers is equal to 6.21 miles

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

Ans.

celsius = 37

fahrenheit = (celsius \* 1.8) + 32

print('%0.1f degree Celsius is equal to %0.1f degree Fahrenheit' %(celsius,fahrenheit))

OUTPUT:

37.0 degree Celsius is equal to 98.6 degree Fahrenheit

1. Write a Python program to display calendar?

Ans.

import calendar

def showCalender():

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

print(calendar.calendar(year))

showCalender()

1. Write a Python program to solve quadratic equation?

Ans.

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)

OUTPUT:

Enter a value: 1

Enter b value: 2

Enter c value: 1

Roots are Real -1.0 -1.0

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

Ans.

x = 5

y = 7

print("Before swapping: ")

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

x, y = y, x

print("After swapping: ")

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

OUTPUT:

Before swapping:

Value of x : 5 and y : 7

After swapping:

Value of x : 7 and y : 5