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

# 1 Km = 0.621 Miles  
km=int(input("Enter the value of distance in kilom : "))  
def kmToMile(km):  
 mile=km\*0.621  
 return mile  
  
a=kmToMile(km)  
print(km," is ",a,"miles")

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

#convert Celsius to Fahrenheit?  
#(0°C × 9/5) + 32 = 32°F'  
celcius=int(input("enter the value of temp in celcius : "))  
  
def CelToFah(celcius):  
 Far=(celcius\*(9/5))+32  
 return Far  
 #print("value in fahrenheit is : ".format(celcius,Far)  
degree=u"\N{DEGREE SIGN}"  
  
f=CelToFah(celcius)  
print(f"{celcius}{degree} is qual to {f} Fahrenheit")

1. Write a Python program to display calendar?

#display calendar  
  
import calendar  
year=int(input("Enter year for which you want to get calendar : "))  
def disCal(y):  
 cal=calendar.calendar(year)  
 return cal  
  
c=disCal(year)  
print(c)

1. Write a Python program to solve quadratic equation?

#solve quadratic equation?  
# f(x) = ax2 + bx + c = 0 where a, b, c, ∈ R and a ≠ 0  
#ax^2+bx+c  
#discriminant=b^2-4ac  
#when b2 − 4ac is positive, we get two Real solutions  
#when it is zero we get just ONE real solution  
#when it is negative we get a pair of Complex solutions  
#(α, β) = [-b ± √(b2 – 4ac)]/2a  
import math  
import cmath  
  
a=int(input("Enter the value of a : "))  
b=int(input("Enter the value of b : "))  
c=int(input("Enter the value of c : "))  
  
def QudEq(a,b,c):  
 discriminant=b^2-4\*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)  
  
qe=QudEq(a,b,c)  
print(qe)

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

a=int(input("Enter first number : "))  
b=int(input("Enter second number : "))  
  
def swap(first,second):  
 print("before swapping : ",first,second)  
 first=first+second  
 second=first-second  
 first=first-second  
 print("After swapping : ",first,second)  
   
swap(a,b)