Python_basic_programming_2

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

In [1]:
```
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 : 50
50.0 km is Equal to 31.05 miles
```

2.Write a Python program to convert Celsius to Farenheit

In [3]:
```
def celToFarh():
    celsius = int(input("Enter temperature in celsius : "))
    Farenheit = (celsius*(9/5))+32
    print("{}° Celsius is Equal to {}° Farenheit".format(celsius,Farenheit))

celToFarh()
```

```
Enter temperature in celsius : 14
14° Celsius is Equal to 57.2° Farenheit
```

3.Write a Python program to display calender ?

In [4]:
```
import calendar

def ShowCalender():
    year = int(input("Enter calender year: "))
    print(calendar.calendar(year))

ShowCalender()
```

```
Enter calender year: 2023
                                  2023

      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            1  2  3  4  5            1  2  3  4  5
 2  3  4  5  6  7  8   6  7  8  9 10 11 12   6  7  8  9 10 11 12
 9 10 11 12 13 14 15  13 14 15 16 17 18 19  13 14 15 16 17 18 19
16 17 18 19 20 21 22  20 21 22 23 24 25 26  20 21 22 23 24 25 26
23 24 25 26 27 28 29  27 28                 27 28 29 30 31
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   1  2  3  4  5  6  7            1  2  3  4
 3  4  5  6  7  8  9   8  9 10 11 12 13 14   5  6  7  8  9 10 11
10 11 12 13 14 15 16  15 16 17 18 19 20 21  12 13 14 15 16 17 18
17 18 19 20 21 22 23  22 23 24 25 26 27 28  19 20 21 22 23 24 25
24 25 26 27 28 29 30  29 30 31              26 27 28 29 30

        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      1  2  3  4  5  6               1  2  3
 3  4  5  6  7  8  9   7  8  9 10 11 12 13   4  5  6  7  8  9 10
10 11 12 13 14 15 16  14 15 16 17 18 19 20  11 12 13 14 15 16 17
17 18 19 20 21 22 23  21 22 23 24 25 26 27  18 19 20 21 22 23 24
```

```
24 25 26 27 28 29 30      28 29 30 31                25 26 27 28 29 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               1  2  3  4  5                  1  2  3
 2  3  4  5  6  7  8       6  7  8  9 10 11 12       4  5  6  7  8  9 10
 9 10 11 12 13 14 15      13 14 15 16 17 18 19      11 12 13 14 15 16 17
16 17 18 19 20 21 22      20 21 22 23 24 25 26      18 19 20 21 22 23 24
23 24 25 26 27 28 29      27 28 29 30               25 26 27 28 29 30 31
30 31
```

4.Write a Python program to solve quadartic equation

In [5]:
```
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: 23
Enter b value: 24
Enter c value: 25
Roots are Imaginary (-0.5217391304347826-0.9026321518272475j) (-0.5217391304347826+0.902
6321518272475j)
```

In [ ]:
```
5.Write a Python program to swap two variables without temp variable ?
```

In [6]:
```
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: 23
Enter second number: 21
```

```
Before Swapping 23 21
before Swapping 21 23
```