Python_basic_programming_2

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

In [2]:
```python
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]:
```python
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]:
```python
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]:
```python
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 (-0.5217391304347826-0.90263215182724
75j) (-0.5217391304347826+0.9
026321518272475j)
```

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

In [6]:
```python
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
```