Python Basics Assignment 2

Q1. Write a Python program to convert kilometers to miles?

In [3]:
```
#function for kilometers to mile calculation
def kilos_to_miles(kilo):
    return kilo * 0.62

#Distance input
dist_kilo= int(input("Input Distance in kilometers"))

print("Distance covered in miles", kilos_to_miles(dist_kilo))
```

```
Input Distance in kilometers150
Distance covered in miles 93.0
```

Q2. Write a Python program to convert Celsius to Fahrenheit?

In [4]:
```
#function for celsius to Fahrenheit calculation
def cel_to_fah(cel):
    return (cel * (9/5))+32

#Distance input
temp_cel= int(input("Input Temperature in Celsius"))

print("Temperature in Fahrenheit", cel_to_fah(temp_cel))
```

```
Input Temperature in Celsius73
Temperature in Fahrenheit 163.4
```

Q3. Write a Python program to display calendar?

In [5]:
```
import calendar
yy = int(input("Enter year = "))
mm = int(input("Enter month in number = "))
print(calendar.month(yy,mm))
```

```
Enter year = 1993
Enter month in number = 8
    August 1993
Mo Tu We Th Fr Sa Su
                   1
 2  3  4  5  6  7  8
 9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28 29
30 31
```

Q4. Write a Python program to solve quadratic equation?

In [12]:
```
#considering formula ax**2+bx+c
import cmath

a=int(input("Enter value of a for equation ax**2+bx+c"))
b=int(input("Enter value of b for equation ax**2+bx+c"))
c=int(input("Enter value of c for equation ax**2+bx+c"))
```

```
def solution(a,b,c):
    d= (b**2) - (4*a*c)
    sol1 = (-b-cmath.sqrt(d))/(2*a)
    sol2 = (-b+cmath.sqrt(d))/(2*a)
    return sol1,sol2

sol1,sol2=solution(a,b,c)
print("Sultion of Quadratic Equation {0}x**2+{1}x+{2} is {3} and {4}".format(a,b,c,sol1
```

```
Enter value of a for equation ax**2+bx+c45
Enter value of b for equation ax**2+bx+c12
Enter value of c for equation ax**2+bx+c3
Sultion of Quadratic Equation 45x**2+12x+3 is (-0.13333333333333333-0.22110831935702666
j) and (-0.13333333333333333+0.22110831935702666j)
```

Q5. Write a Python program to swap two variables without temp variable?

In [13]:
```
var1= input("Enter First Variable")
var2= input("Enter Second Variable")

print("Values of Variable 1 and 2 before swaping", var1 ,var2)
var1,var2=var2,var1
print("Values of Variable 1 and 2 after swaping", var1 ,var2)
```

```
Enter First Variable10
Enter Second Variable20
Values of Variable 1 and 2 before swaping 10 20
Values of Variable 1 and 2 after swaping 20 10
```

In [ ]:
```

```