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

In [1]:
```
kms = int(input('enter the distance in Kilometers: '))

miles = 0.621371 * kms

print()
print("Converted distance is ", miles, " miles")
```

```
enter the distance in Kilometers: 5

Converted distance is  3.106855  miles
```

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

In [2]:
```
deg_C = int(input('enter the temperature in degree Celsius: '))

F = (deg_C * 9/5) + 32

print()
print("Converted temperrature is ", F, "Fahrenheit")
```

```
enter the temperature in degree Celsius: 37

Converted temperrature is  98.6 Fahrenheit
```

Q3 : Write a Python program to display calendar?

In [3]:
```
import calendar

yy = int(input("Enter the year :"))
mm = int(input("Enter the month - number :"))

print()
print(calendar.month(yy, mm))
```

```
Enter the year :2022
Enter the month - number :5

      May 2022
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?

ax2 + bx + c

In [4]:
```python
import math

def equationroots(a, b, c): #Creating a Function

    dis = b * b - 4 * a * c        # calculating discriminant
    sqrt_val = math.sqrt(abs(dis)) # under root of b2-4ac

# checking condition for discriminant
    if dis > 0:
        print(" The Quadratic Equation has real and different roots. They are ")
        print((-b + sqrt_val)/(2 * a))
        print((-b - sqrt_val)/(2 * a))

    elif dis == 0:
        print("  The Quadratic Equation has real and same root. It is")
        print(-b / (2 * a))

    # when discriminant is less than 0
    else:
        print(" The Quadratic Equation has Complex Roots. They are ")
        print(- b / (2 * a), " + i", sqrt_val)
        print(- b / (2 * a), " - i", sqrt_val)


a = int(input(" Enter a value: "))
b = int(input(" Enter b value: "))
c = int(input(" Enter c value: "))

if a == 0:
    print()
    #print("Quadratic Equation is: ", a,"x^2 +",b,"x +",c )
    print("Input correct quadratic equation : a cannot be Zero")
else:
    print()
    #print("Quadratic Equation is: ", a,"x^2+",b,"x+",c )
    equationroots(a, b, c)
```

```
 Enter a value: 1
 Enter b value: -5
 Enter c value: 6

 The Quadratic Equation has real and different roots. They are
3.0
2.0
```

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

In [5]:
```python
variable1 = 20
variable2 = 40

print("variables Before Swap")
print ("variable1 : " , variable1)
print ("variable2 : " , variable2)

# Swapping Variables
variable1, variable2 = variable2, variable1

print()
print("variables After Swap")
print ("variable1 : " , variable1)
print ("variable2 : " , variable2)
```

```
variables Before Swap
variable1 :  20
variable2 :  40

variables After Swap
variable1 :  40
variable2 :  20
```