

Sprint 5 Challenge

In [1]: *#Converting Radians to Degrees and Degrees to Radians*

```
def rad_deg():
    pi = 22/7
    output = input('Please enter A to convert degrees to radians and B to convert from radians to degrees ')
    if output == 'A':
        degree = float(input('Please enter the degrees value: '))
        degree_radian = degree*(pi/180)
        print('The value of entered degrees in radians is', degree, '=', degree_radian, 'radians')
    elif output == 'B':
        radian = float(input('Please enter the radians value: '))
        radian_degree = radian*(180/pi)
        print('The value of entered radians in degrees is', radian, '=', radian_degree, 'degrees')
    else:
        print('Invalid input, please enter the correct input')
rad_deg()
```

Please enter A to convert degrees to radians and B to convert from radians to degrees A
Please enter the degrees value: 25
The value of entered degrees in radians is 25.0 = 0.4365079365079365 radians

In [7]:

```
def fact_sq():
    answer = input('Please enter A to print the factorial of a number and B to print its square root ')
    if answer == 'A':
        factorial = int(input('Enter number to convert fact to square '))
        end = 1
        while (factorial > 0):
            end = end * factorial
            factorial = factorial - 1
        print('The factorial of given number is', end)
    elif answer == 'B':
        square_root = float(input('Please enter a positive number: '))
        square_root = square_root ** 0.5
        print('The square root of %.3f is %.3f'%(square_root, square_root))
fact_sq()
```

Please enter A to print the factorial of a number and B to print its square root A
Enter number to convert fact to square 4
The factorial of given number is 24

In [3]:

```
def cel_fah():
    answer = input('Please enter A to convert Celsius to Fahrenheit and B to convert Fahrenheit to Celsius ')
    if answer == 'A':
        celsius = float(input('Please enter the temperature to be converted into fahrenheit '))
        cel_fah = (celsius * 1.8) + 32
        print('The given temperature in celsius is', cel_fah, 'degrees fahrenheit')
    elif answer == 'B':
        fahrenheit = float(input('Please enter the temperature to be converted into celsius '))
        fah_cel = (fahrenheit - 32)/1.8
        print('The given temperature in fahrenheit is', fah_cel, 'degrees celsius')
cel_fah()
```

Please enter A to convert Celsius to Fahrenheit and B to convert Fahrenheit to Celsius A
Please enter the temperature to be converted into fahrenheit 6.7
The given temperature in celsius is 44.06 degrees fahrenheit

```
In [1]: def kmeho():
value = input('Please enter A to convert Kilometre/Hour to Meters/Second and B to convert Meters/second into Kilometere/Hour ')
if value == 'A':
    metre_second = float(input('Enter your value in km/h '))
    mese = (metre_second*5/18)
    print(metre_second, 'is equal to', mese, 'm/s')
elif ans == 'B':
    kmetre_hour = float(input('Please enter your value in m/s '))
    kimeho = (kmetre_hour*18/5)
    print(kmetre_hour, 'is equal to', kimeho, 'km/h')
kmeho()
```

Please enter A to convert Kilometre/Hour to Meters/Second and B to convert Meters/second into Kilometere/Hour A
Enter your value in km/h 5
5.0 is equal to 1.3888888888888888 m/s

```
In [6]: def charascii():
value = input('Please enter A to convert a character to its ASCII value and B to convert an ASCII value into a character ')
if value == 'A':
    asc = input('Please enter any character ')
    print('The ASCII value of', asc, 'is', ord(asc))
elif value == 'B':
    char = int(input('Please enter an ASCII value '))
    print('The character corresponding to the ASCII value', char, 'is', chr(char))
charascii()
```

Please enter A to convert a character to its ASCII value and B to convert an ASCII value into a character B
Please enter an ASCII value 67
The character corresponding to the ASCII value 67 is C

In []: