Assignment 17

Create a function that takes three arguments a, b, c and returns the sum of the numbers that are evenly divided by c from the range a, b inclusive.

In [3]:
```
a = int(input("Enter a number: "))
b = int(input("Enter a number: "))
c = int(input("Enter a number: "))

def Sum(a,b,c):

    sum = 0

    for i in range(a,b+1):
        if i%c==0:
            sum+=1
    return sum

Sum(a,b,c)
```

```
Enter a number: 2
Enter a number: 20
Enter a number: 2
```

Out[3]: 10

2.Create a function that returns True if a given inequality expression is correct and False otherwise.

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3.Create a function that replaces all the vowels in a string with a specified character.

In [6]:
```
a = input("Enter the character: ")
def replace(test,a):
    vowels = 'AEIOUaeiou'

    for i in vowels:

        test = test.replace(i,a)

    return test

test = "Hope you are having a great day"

replace(test,a)
```

```
Enter the character: #
```

Out[6]: 'H#p# y## #r# h#v#ng # gr##t d#y'

4.Write a function that calculates the factorial of a number recursively.

In [10]:
```
a = int(input("Enter a number: "))

def factorial(a):
    if a == 1:
        return a
    elif a < 0:
        print("Negative number cannot have a factorial")
    elif a == 0:
        print("factorial for 0 is 1")
    else:
        return a*factorial(a-1)

factorial(a)
```

```
Enter a number: 20
```

Out[10]: 2432902008176640000

5. Hamming distance is the number of characters that differ between two strings.

In [14]:
```
a = input("Enter the string: ")
b = input("Enter another string: ")

def hamming(a,b):
    i = 0
    count = 0

    while i <len(a):
        if a[i] != b[i]:
            count +=1
        i +=1
    return count

hamming(a,b)
```

```
Enter the string: abcdefg
Enter another string: abcdffg
```

Out[14]: 1

In [ ]:
```

```