

## Mini Challenge 1

Write a function using variable number of parameters concept to count the number of occurrences of each character in a given bunch of strings.

Note: Function returns a dictionary.

### Example function call & Output:

```
countChars("Gary", "Kris", "Cathy", "John", "Alex")
```

```
{'l': 1, 'K': 1, 'R': 2, 'N': 1, 'E': 1, 'H': 2, 'X': 1, 'O': 1, 'C': 1, 'S': 1, 'T': 1, 'A': 3, 'J': 1, 'L': 1, 'Y': 2, 'G': 1}
```

```
In [1]: def countChars( *args):
        charDict = {}

        for s in args:
            for c in s:
                c = c.upper()
                if( c in charDict ):
                    charDict[c] = charDict[c] + 1
                else:
                    charDict[c] = 1

        return charDict

charCounter = countChars("Gary", "Kris", "Cathy", "John", "Alex")
print( charCounter )

{'K': 1, 'I': 1, 'X': 1, 'A': 3, 'R': 2, 'S': 1, 'H': 2, 'L': 1,
'T': 1, 'C': 1, 'O': 1, 'Y': 2, 'G': 1, 'E': 1, 'J': 1, 'N': 1}
```

## Mini Challenge 2

Write myRange function, that takes one, two or three parameters and produces numerical sequences, just like Python's range function.

Note: This function will return a range object. We have to use list() function to see the contents:

### Example Call:

```
R = myRange(5, 30 )
print( list(R) )
```

```
In [2]: def myRange( *args ):
        """ My Range Function """
        start = stop = step = 0
        if( len(args) == 3 ):
            start = args[0]
            stop = args[1]
            step = args[2]

        elif( len(args) == 2 ):
            start = args[0]
            stop = args[1]
            step = 1

        else:
            start = 0
            stop = args[0]
            step = 1

        i = start
        while( i < stop ):
            yield i
            i = i + step

A = myRange(5,30, 2 )
print(list(A))
```

```
[5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29]
```

```
In [ ]:
```