

In [92]: #1. Python function that takes a list of words and return the longest word and the length of the longest one.

```
#Step 1: Define a function which returns the longest word
def getTheLongestWord(wordlist) :
    listToString = ' '.join(wordlist)
    splitList = listToString.split()

    j=0
    length = len(wordsList);
    for i in range(0, length):
        if(len(splitList[i])>len(splitList[j]]):
            j =i;
    return splitList[j]

#Step 2:
wordlist = ['Python', 'is', 'both', 'a', 'strongly', 'typed', 'and', 'a', 'dynamically', 'typed', 'language']

#Step 3: Print the longestword and its length
LongestWord = getTheLongestWord(wordlist)

print('Longest word is : ',LongestWord)
print('Length of the word :', len(LongestWord))
```

Longest word is : Pythdddddon
Length of the word : 11

In [102]: #2. Python function to remove the nth index character from a nonempty string.

```
def removeCharAt(inputstring, n):
    strBeforeTheIndex = inputstring[:n]
    strAfterTheIndex = inputstring[n+1:]
    return strBeforeTheIndex + strAfterTheIndex

inputString = input('Enter a string: ')
index=int(input("Enter the index of the character to remove:"))

print("Modified string:",removeCharAt(inputString, index))
```

Enter a string: Python is a very powerful and high-level program
Enter the index of the character to remove:7
Modified string: Python s a very powerful and high-level program

In [99]: #3. Python function to get the last part of a string before a specified character.

```
#Step 1 :
sample_str = 'Python is a very popular general-purpose interpreted interactive;it is object-oriented, and high-

#Step 2: Enter the character for rsplit
char_ = input('Enter the character')

print('Original String ',sample_str)
print('New String: ',sample_str.rsplit(char_,1)[0])
```

Enter the character,
Original String Python is a very popular general-purpose interpreted interactive;it is object-oriented, and high-level programming language
New String: Python is a very popular general-purpose interpreted interactive;it is object-oriented

In [91]: #4. Python function to sort a string lexicographically.

```
original_list = ["Java","Rest Web Services","Python","Pascal","Spring","Angular"]

# Step 1: We will use the sorted() function to sort the given string in lexicographical order
lexicographical_list = sorted(original_list)

print('Original List :',original_list)
print('Lexicographically sorted list :',lexicographical_list)
```

Original List : ['Java', 'Rest Web Services', 'Python', 'Pascal', 'Spring', 'Angular']
Lexicographically sorted list : ['Angular', 'Java', 'Pascal', 'Python', 'Rest Web Services', 'Spring']

In [89]: #5. Python function to remove spaces from a given string.

```
inputString = input('Enter a string: ')

newString = inputString.replace(' ','')
print('New String :',newString)
```

Enter a string: Om Sai Ram
New String : OmSaiRam