1.Python function that takes a list of words and return the longest word and the length of the longest one.

In [24]:
```
def longest(a):
    max1 = len(a[0])
    temp = a[0]

    # for loop to traverse the list
    for i in a:
        if(len(i) > max1):

            max1 = len(i)
            temp = i

    print("The longest word is:", temp,
          " and length is ", max1)
```

In [25]:
```
a = ['one' ,'two','three']
```

In [26]:
```
longest(a)
```

```
The longest word is: three  and length is  5
```

2. Python function to remove the nth index character from a nonempty string.

In [31]:
```
def remove_nth_index(string, n):
    if len(string)<2:
        return "contains less than 2 characters"
    first = string[:n]
    last = string[n+1:]
    return first + last
print(remove_nth_index("hello world",3))
```

```
helo world
```

3. Python function to get the last part of a string before a specified character.

In [67]:
```
def last_str(string,char):
   lst1 = string.split(char)
   return lst1[-1]

print(last_str('abcde figh','d'))
```

```
e figh
```

4. Python function to sort a string lexicographically.

In [81]:
```
def Lexo(string):
        words = string.split()
        words.sort()
        for word in words:
                print( word )
print(Lexo('hello how are you'))
```

```
are
hello
how
you
None
```

5.Python function to remove spaces from a given string.

In [76]:
```
def remove_spaces(string):
    return string.replace(' ','')
```

In [78]:
```
remove_spaces("python prog lang")
```

Out[78]:
```
'pythonproglang'
```

In [ ]:
```
```