Assignment-3

1. Python function that takes a list of words and return the longest word and the length of the longest one.
2. Python function to remove the nth index character from a nonempty string.
3. Python function to get the last part of a string before a specified character.
4. Python function to sort a string lexicographically.
5. Python function to remove spaces from a given string.

Ans:

PROGRAM

```
def find_longest_word(words_list):
    word_len = []
    for n in words_list:
        word_len.append((len(n),n))
    word_len.sort()
    return word_len[-1][0], word_len[-1][1]
result = find_longest_word(["ABC","LONGEST","SMALL"])
print("\nLongest word:", result[1])
print("Length of the longest word:", result[0])
```

OUTPUT:

```
Longest word: LONGEST
Length of the longest word: 7
```

2Ans PROGRAM:

```
def remove(string,n):
    first = string[:n]
    last = string[n+1:]
    return first + last
String=input("Enter the string:")
n=int(input("Enter the index of the character to remove:"))
print("Modified string:")
print(remove(String,n))
```

OUTPUT:

```
Enter the string: Program
Enter the index of the character to remove: 6
Modified string:
Programe
```

3Ans

```
Str1 = 'http://www.w3resource.com/python-exercise/string'
print(Str1.rsplit('/',1)[0])
print(Str1.rsplit('-',1)[0])
```

OUTPUT:

```
https://www.w3resource.com/python-exercises
https://www.w3resource.com/python
```

```
String = 'bobby-hadz-com'
# Get part of string before FIRST occurance of character
before_character = String.split('-',1)[0]
```

```
print (before_character)
#Get part of string before LAST occurance of character
before_character = string.rsplit ('-',1)[0]
print (before_character)
```

OUTPUT:

```
bobby
bobby-had2
```

ANS 4

```
# Custom sorting function for lexicographical sorting of string
def lexicalsort(input_string):
    #Using the split() function to get a list of words
    listOfWords = input_string.split()
    #Using sort() function
    ListOfWords.sort()
    #Variable to store output string
    Output_str = ""
    #forming a sorted string
    for word in ListOfwords:
        Output_str = output_str+Word+" "
    return Output_str
# initial string
initial_str = "bob eating apple and desert in cafe"
# printing original string
Print ("String before sorting:", initial_str)
```

```
# calling custom lexical sort function
print ("string after sorting:", lexical sort (initial - str)
```

OUTPUT:

String before sorting : bob eating apple and deseart in cafe
String after sorting: and apple bob cafe desert eating in

ANS(5)

PROGRAM:

```
def remove (string):
    ns = ""
    for i in string:
        if (not i.isspace()):
            ns+ = i
    return ns
# Driver program
string = 'S p a c e s'
print (remove (string))
```

OUTPUT:

Spaces.