

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

```
def count_word_length(my_list):
    counter = 0
    for item in my_list:
        if len(item) >= counter:
            counter = len(item)
    return counter

temp_list = ["hellohowareyou", "world", "a", "long", "min"]
print("Longest word count is %d" %count_word_length(temp_list))
```

Longest word count is 14

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

```
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))
```

```
Enter the string: excellent
Enter the index of the character to remove: 4
Modified string:
Excel
```

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

```
str1 = 'https://google.com/exercises/.com/match'
print(str1.rsplit('/', 1)[0])

https://google.com/exercises/.com
```

4. Python function to sort a string lexicographically.

```
def lexicographi_sort(s):
    return sorted(sorted(s), key=str.upper)

print(lexicographi_sort('afdhdkjutreb'))
print(lexicographi_sort('11225536314'))
['a', 'b', 'd', 'e', 'f', 'h', 'j', 'k', 'l', 'r', 't', 'u']
['1', '1', '1', '2', '2', '3', '3', '4', '5', '5', '6']
```

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

```
def remove_spaces(str1):
    str1 = str1.replace(' ', '')
    return str1
```

```
print(remove_spaces("abcdf "))
print(remove_spaces("122345"))
```

```
abcdf
122345
```