

1. Python – Replace multiple words with K

```
In [1]: test_str = 'Goods are good is best for goods and CS'

print("The original string is : " + str(test_str))

word_list = ["best", 'CS', 'for']

repl_wrd = 'gdg'

res = ' '.join([repl_wrd if idx in word_list else idx for idx in test_str.split()])

print("String after multiple replace : " + str(res))
```

The original string is : Goods are good is best for goods and CS
String after multiple replace : Goods are good is gdg gdg goods and gdg

2. Python | Permutation of a given string using inbuilt function.

```
In [2]: from itertools import permutations

def allPermutations(str):

    permList = permutations(str)

    for perm in list(permList):
        print (''.join(perm))

if __name__ == "__main__":
    str = 'ABC'
    allPermutations(str)

ABC
ACB
BAC
BCA
CAB
CBA
```

3. Python | Check for URL in a String

```
In [3]: import re

def Find(string):

    regex = r"(?i)\b((?:https?://www\d{0,3}[.][a-z0-9.-]+[.][a-z]{2,4}/)(?:[^\s()<>+|\\]((^\s())<>+|\\((^\s())<>+|\\((^\s())<>+))?)?)\b"
    url = re.findall(regex,string)
    return [x[0] for x in url]

string = 'My Profile: https://auth.google.org/user/Chinmoy%20Lenka/articles in the portal of https://www.google.org'
print("Urls: ", Find(string))

Urls:  ['https://auth.google.org/user/Chinmoy%20Lenka/articles', 'https://www.google.org/']
```

4. Execute a String of Code in Python

```
In [4]: def exec_code():
        LOC = """
def factorial(num):
    fact=1
    for i in range(1,num+1):
        fact = fact*i
    return fact
print(factorial(5))
"""
        exec(LOC)

exec_code()
```

5.String slicing in Python to rotate a string

```
In [5]: def rotate(input,d):

    Lfirst = input[0 : d]
    Lsecond = input[d : ]
    Rfirst = input[0 : len(input)-d]
    Rsecond = input[len(input)-d : ]

    print ("Left Rotation : ", (Lsecond + Lfirst) )
    print ("Right Rotation : ", (Rsecond + Rfirst))

if __name__ == "__main__":
    input = 'GoodsforGood'
    d=2
    rotate(input,d)

Left Rotation : odsforGoodGo
Right Rotation : odGoodsforGo
```

6.String slicing in Python to check if a string can become empty by recursive deletion

```
In [6]: def checkEmpty(input, pattern):

    if len(input)== 0 and len(pattern)== 0:
        return 'true'

    if len(pattern)== 0:
        return 'true'

    while (len(input) != 0):

        index = input.find(pattern)

        if (index ==(-1)):
            return 'false'

        input = input[0:index] + input[index + len(pattern):]

    return 'true'

if __name__ == "__main__":
    input ='GOODSISGOOD'
    pattern ='GOOD'
    print (checkEmpty(input, pattern))

false
```

7. Python Counter| Find all duplicate characters in string

```
In [7]: from collections import Counter

def find_dup_char(input):

    WC = Counter(input)

    for letter, count in WC.items():
        if (count > 1):
            print(letter)

if __name__ == "__main__":
    input = 'goodsforgood'
    find_dup_char(input)

g
o
d
```

8. Python – Replace all occurrences of a substring in a string.

```
In [8]: input_string = "goodsforgood"
        s1 = "good"
        s2 = "abcd"
        input_string = input_string.replace(s1, s2)
        print(input_string)

        abcdsforabcd
```

9. Python – Extract Unique values dictionary values.

```
In [12]: my_dict = {'hi' : [5,3,8, 0],
                  'there' : [22, 51, 63, 77],
                  'how' : [7, 0, 22],
                  'are' : [12, 11, 45],
                  'you' : [56, 31, 89, 90]}

print("The dictionary is : ")
print(my_dict)

my_result = list(sorted({elem for val in my_dict.values() for elem in val}))

print("The unique values are : ")
print(my_result)

The dictionary is :
{'hi': [5, 3, 8, 0], 'there': [22, 51, 63, 77], 'how': [7, 0, 22], 'are': [12, 11, 45], 'you': [56, 31, 89, 90]}
The unique values are :
[0, 3, 5, 7, 8, 11, 12, 22, 31, 45, 51, 56, 63, 77, 89, 90]
```

10. Python program to find the sum of all items in a dictionary.

```
In [13]: def returnSum(myDict):

list = []
for i in myDict:
    list.append(myDict[i])
final = sum(list)

return final

dict = {'a': 100, 'b': 200, 'c': 300}
print("Sum :", returnSum(dict))

Sum : 600
```