

Assignment 3 Module 3.

1. Count Occurrences of all characters within a String.

While True:

print ("Enter 'x' for exist.")

string = input ("Enter any string:")

if string == 'x':

break

else:

char = input ("Enter a character to count:")

val = string.count (char)

print (val, "\n").

2. Sum and Average of the digits that appear in a String:

numbers = int (input ("please Enter any Number:"))

total = 0

for value in range (1, numbers + 1):

total = total + value

average = total / numbers

print ("The sum of Natural Numbers from 1 to {0} = {1}", format

(numbers, total))

print ("Average of Natural Numbers from 1 to {0} = {1}", format

(numbers, average)).

(OR)

```

def sum_digits_string(str1):
    sum_digit = 0
    for x in str1:
        if x.isdigit() == True:
            z = int(x)
            sum_digit = sum_digit + z
    return sum_digit
print(sum_digits_string("14ab37r65"))

```

3. string input count all lower case, upper case, digits and special symbols.

```

def Count(str):
    upper, lower, number, special = 0, 0, 0, 0
    for i in range(len(str)):
        if str[i].isupper():
            upper += 1
        elif str[i].islower():
            lower += 1
        elif str[i].isdigit():
            number += 1
        else:
            special += 1
    print('Upper case letters:', upper)
    print('Lower case letters:', lower)
    print('Numbers:', number)
    print('special characters:', special)
    str = "$Geek5Book@593A"
    Count(str)

```


4. String Characters such that lowercase letters should come first.

```
inputStr = "pyNative"
```

```
words = inputStr.split()
```

```
lower = []
```

```
Upper = []
```

```
for char in inputStr:
```

```
    if char.islower():
```

```
        lower.append(char)
```

```
    else:
```

```
        Upper.append(char)
```

```
sortedString = ' '.join(lower + Upper)
```

```
print("In arranging characters given precedence to lowercase letters:")
```

```
print(sortedString)
```

5. Q. S₁ and S₂, create a new string by appearing S₂ in the middle of S₁.

```
def appendMiddle(s1, s2):
```

```
    middleIndex = int(len(s1)/2)
```

```
    print("Original strings are", s1, s2)
```

```
    middleThree = s1[:middleIndex-1:] + s2 + s1[middleIndex+1:]
```

```
    print("After appending new string in middle", middleThree)
```

```
appendMiddle("Apple", "Eat Every morning")
```