1. Write a program to find the number of vowels, consonents, digits and white space characters in a string.

```
In [13]: word=input("Enter The Word = ")
         vowels = "aeiou"
         consonants = "bcdfghjklmnpqrstvwxyz"
         digits = "1234567890"
         space = " "
         consonant = 0
         vowel = 0
         digit = 0
         spaces = 0
         for i in word:
             if i in vowels:
                 vowel+=1
             elif i in consonants:
                 consonant+=1
             elif i.isdigit():
                 digit+=1
             elif i in space:
                 spaces+=1
         print("vowels = ",i,"=",vowel)
         print("consonant = ", consonant)
         print("digit = ", digit)
         print("Spaces = ", spaces)
         Enter The Word = ajithaeiuo 123
         vowels = 3 = 7
         consonant = 3
         digit = 3
```

2. Write a program to make a new string with all the consonents deleted from the string "Python's simplicity and readability make it a popular choice for beginners in programming.".

```
word=input("Enter The Word = ")
string=""
vowels="aeiou"
for i in word:
    if i in vowels:
        string+=i
    else:
        continue
print("After Removing consonants = ", string)
Enter The Word = ajith krishna
After Removing consonants = aiia
```

3. Write a program to make the string after the first occurrence of ',' and the string after the last occurrence of ',' in the string "Hello, Good Morning, have a great day".

```
word="Hello, Good morning, Have A Great Day"
print('"', word[6:18]+word[19:], '"')
" Good morning Have A Great Day "
```

4. Write a Python program to get a string from a given string where all the repeated character replaced with except the first occurrences of character itself (eg: "hello" -> "hel_o").

```
In [35]: word=input("Enter The Word = ")
         for i in word:
             x= word.count(i)
             if x>1:
                 print("_",end=" ")
                 print(i,end=" ")
         Enter The Word = ajithkrishna
         _ j _ t _ k r _ s _ n _
```

5. Write a Python function to reverses a string if its length is a multiple of 5

Spaces = 1

Out[50]:

```
def reverse(word):
In [50]:
             rev=""
             if len(word)>=5:
                 for i in word:
                     rev=i+rev
                 print("length of the string = ",len(word))
                 return "Reverse of the string = ",rev
             else:
                 print("length of the string = ",len(word))
                 print(word)
         word=input("Enter The Word = ")
         reverse(word)
         Enter The Word = ajith
         length of the string = 5
         ('Reverse of the string = ', 'htija')
```

6. Write a Python program to find smallest and largest word in a given string.

```
In [37]: string=input("Enter The String = ")
         print("smallest word = ", min(string))
         print("largest word = ", max(string))
         Enter The String = ajith
         smallest word = a
         largest word = t
```

7. Write a Python program find the common values that appear in two given strings.

```
string1=input("Enter The String 1 = ")
string2=input("Enter The String 2 = ")
common_string=""
for i in string1:
    for j in string2:
        if i==j:
            common_string+=i
print("common String = ", set(common_string))
Enter The String 1 = ajith
Enter The String 2 = ajith krishna
common String = {'j', 'i', 'a', 'h', 't'}
```

8. Calculate the sum and average of the digits present in the string "python2764%#@10".

```
In [72]: string="python2764%#@10"
       li=[]
       for i in string:
          if(i>='0' and i<='9'):
             li.append(int(i))
       print("sum of the string = ", sum(li))
       print("Average of the string Value = ", sum(li)/len(li))
       sum of the string = 20
```

9. Write a program to split a given string on space and display each substring.

```
In [74]: print("before split")
         word=input("Enter The word = ")
         split=word.split(" ")
         print("After Split = ",split)
         before split
         Enter The word = ajith krishna 239 @ gmail.com
         After Split = ['ajith', 'krishna', '239', '@', 'gmail.com']
```

Write a program to check if two strings are balanced. For example, strings s1 and s2 are balanced if all the characters in the s1 are present in s2. The character's positio doesn't matter.

```
In [77]: s1="ajith"
         s2="htija"
         x=set(s1)
         y=set(s2)
         if x==y and len(s1)==len(s2):
             print("length of s1 = ",len(s1))
             print("length of s2 = ",len(s2))
             print(s1,s2,"The Two string are balanced")
             print("length of s1 = ",len(s1))
             print("length of s2 = ", len(s2))
             print(s1, s2, "The Two string are Not balanced")
         length of s1 = 5
         length of s2 = 5
         ajith htija The Two string are balanced
```