Bridge Course
Python Strings

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1. Write a Python program to find out the number of vowels and consonants of a given
string.
Case 1 Input: drink
Expected Result: No of vowels: 1
No of consonants: 4

```
string = input("Enter a string: ").lower()
vowels = "aeiou"
v_count = sum(1 for ch in string if ch in vowels)
c_count = sum(1 for ch in string if ch.isalpha() and ch not in vowels)
print("No of vowels:", v_count)
print("No of consonants:", c_count)
```

2. Write a program to count the number of letters in a word.

```
word = input("Enter a word: ")
print("Number of letters:", len(word))
```

3. 1) Write a program to accept a line and print its statistics like:
a) Number of uppercase letters
b) Number of lowercase letters
c) Number of alphabets
d) Number of digits

```
line = input("Enter a line: ")
upper = sum(1 for ch in line if ch.isupper())
lower = sum(1 for ch in line if ch.islower())
alpha = sum(1 for ch in line if ch.isalpha())
digits = sum(1 for ch in line if ch.isdigit())

print("Uppercase letters:", upper)
print("Lowercase letters:", lower)
print("Alphabets:", alpha)
print("Digits:", digits)
```

4. Write a program that accepts a string and display the string in the following order.
Input : Enter a string: Hello
Output:
H
He
Hel
Hell
Hello

```
string = input("Enter a string: ")
for i in range(1, len(string) + 1):
   print(string[:i])
```

5. Write a program that extracts the digits from a given string and find the sum of digits.
Input: Enter a string: hello123@gmail.com
Output: The original string is: hello123@gmail.com
The digits are: 1,2,3
The sum of the digits are:6
Input: Enter a string: hello
Output: The original string is: hello
The string does not contain any digit.

```
s = input("Enter a string: ")
digits = [int(ch) for ch in s if ch.isdigit()]

print("The original string is:", s)
if digits:
   print("The digits are:", ",".join(map(str, digits)))
   print("The sum of the digits are:", sum(digits))
else:
   print("The string does not contain any digit.")
```

6. Write a Python program to check the user name and password as mentioned below .
a) The user name must contain only alphabets.
b) The password must contain the following:
i. The length must be 7.
ii. The first letter must be an uppercase letter.
Input: Enter the user name: skumar

Enter the password: AsdfgfhOutput: The user login created successfully
Input: Enter the user name: skumars
Enter the password: asdfgfhiOutput: Password length must be strictly 7 and it should start with uppercase letter.

```
username = input("Enter the user name: ")
password = input("Enter the password: ")

if not username.isalpha():
   print("Username must contain only alphabets.")
elif len(password) != 7 or not password[0].isupper():
   print("Password length must be strictly 7 and it should start with
uppercase letter.")
else:
   print("The user login created successfully")
```

8. Write a program to find out the length of a given string. Don't take blank spaces into account while counting the length .
Input: Enter a String: I Love India.
Output: The length of the string is :10

```
s = input("Enter a string: ")
length = len(s.replace(" ", ""))
print("The length of the string is:", length)
```

9. Write a Python program to remove characters that have odd index values in a given string. Input: India.
Output: Ida

```
s = input("Enter a string: ")
new_str = "".join(s[i] for i in range(len(s)) if i % 2 == 0)
print(new_str)
```

10. Write a Python program to check whether a string starts with specified characters.

```
s = input("Enter a string: ")
start = input("Enter starting characters to check: ")

if s.startswith(start):
   print("Yes, it starts with", start)
```

```
else:
    print("No, it doesn't start with", start)
```