Chapter 3 : String's
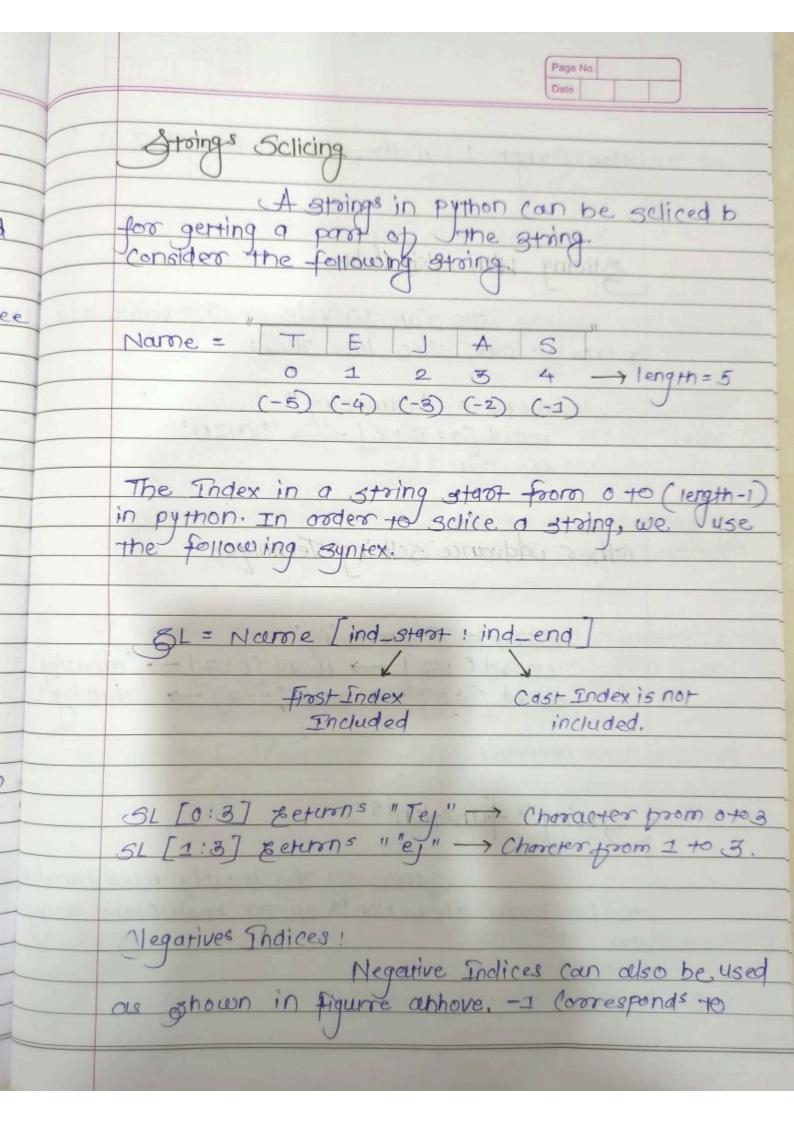
String is a data Type in Python.

String is a sequence of characters enclosed in quotes.

We can primerily, write a string in these three ways.

1] Single quoted String's $\longrightarrow$ a = 'Tejas'

2] Double quoted strings $\longrightarrow$ b = "Tejas"

3] Triple quoted strings $\longrightarrow$ c = ''' Tejas '''

How to create a String in python

String can be created by enclosing characters inside a single quote or double quotes. Even triple quotes can be used in python but generally used to represent multiline & docstrings.
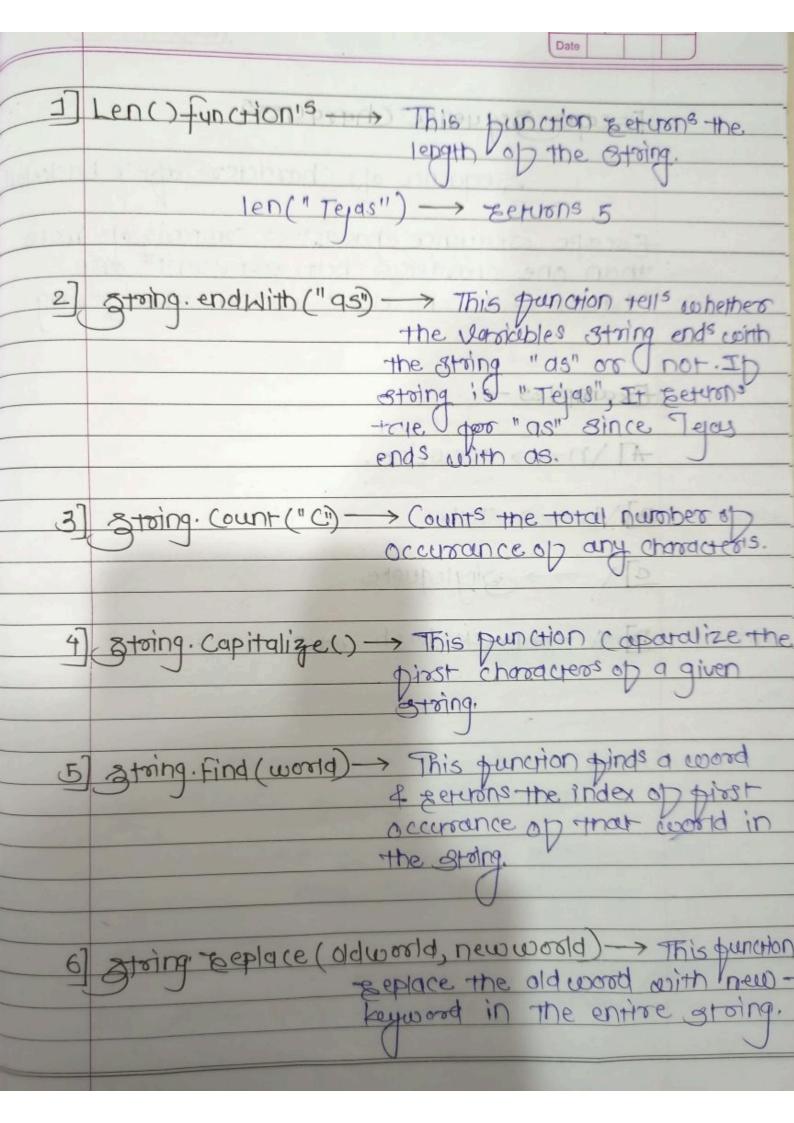
```
my_strings = " Hello Tejas"
print ( my_string)
```

Strings Sclicing

A strings in python can be scliced b for getting a part of the string. Consider the following string.

T	E	J	A	S

Name =

0   1   2   3   4 $\longrightarrow$ length = 5

(-5) (-4) (-3) (-2) (-1)

The Index in a string start from 0 to (length-1) in python. In order to sclice a string, we use the following syntex.

$$SL = Name [ind\_start : ind\_end]$$

first Index   Cast Index is not
Included   included.

SL [0:3] returns "Tej" $\longrightarrow$ Character from 0 to 3
SL [1:3] returns "ej" $\longrightarrow$ Character from 1 to 3.

Negatives Indices !

Negative Indices can also be used as shown in figure abhove. -1 corresponds to

the (length - 1) indix, -2 to (length - 2)

Slicing with skip value

we can provide a skip value as a part of our slice like this:

word = "amazing"
word[1 : 6 : 2] $\longrightarrow$ 'mzn'

Other Advance Sclicing Technique

word = "Amazing"
word[: 7] $\longrightarrow$ word[0 : 7] $\longrightarrow$ 'amazing'
word[0 :] $\longrightarrow$ word[0 : 7] $\longrightarrow$ 'amazing'

String's function's

some of the mostly used functions to perform operation's on or manceplete strings are:

1] Len() function's ⟶ This function returns the length of the string.

len("Tejas") ⟶ returns 5

2] string.endWith("as") ⟶ This function tells whether the variables string ends with the string "as" or not. If string is "Tejas", It returns true for "as" since Tejas ends with as.

3] string.Count("C") ⟶ Counts the total number of occurance of any character's.

4] string.Capitalize() ⟶ This function caparalize the first characters of a given string.

5] string.Find(world) ⟶ This function finds a word & returns the index of first occurance of that world in the string.

6] string.replace(old world, new world) ⟶ This function replace the old word with new-keyword in the entire string.

Escape Sequence Characters

Sequence of Characters after backslash

Escape sequence characters comparis of more than one characters but represents one characters when used within the string.

Examples —

A] \n ⟶ NewLine.

B] \t ⟶ Tab

C] \ ⟶ singlequote.

D] \\ ⟶ Backslash etc.

Practice Set.

1. Write a python program to display a user entered name followed by good afternoon using input() function.

2. Write a program to fill in a letter template given below with name & data

   letter = "Dear <| NAME |>

   you are selected!
   <| Date >

3. Write a python program to delete double space in a string.

4. Replace the double space from problem 3 with single space.

5. Write a program to format the following letter using escape sequence characters.

   letter = " Dear Tejas, This python cource is nice. Thanks!".