

String slicing refers to getting a subset of the characters in a string. Keep the below indexing in mind,

indexing

	+	+	+	+	+	+	+
		P		y		t	
	+	+	+	+	+	+	+
	0	1	2	3	4	5	6
		-6	-5	-4	-3	-2	-1

You can say “thon” is a slice of string “Python”. So is, “ython”, “t”, “Pytho” etc. We can use the **operator** “:” to get a slice of the string.

Examples,

1. the “:” operator can be used as below

```
>>> str="Python"
>>> str[2:4]
'th'
```

Here I have given “2:4” as the index which means get all characters starting at index 2 (**including**) till index 4 (**excluding**).

2. See another example where if the starting position is missing,

```
>>> str[:4]
'Pyth'
```

As you can see when the starting position is missing, it’s considered as starting from index “0”.

3. Another one where the ending position is missing

```
>>> str[2:]
'thon'
```

As we followed in last class,

1. Please create a git branch called "feature\_slicing\_ooperations".
2. Rebase your repo in pycharm
3. Checkout the feature branch you created in pycharm
4. Then create a new python file called "string\_slicing\_operations.py"

Create a python program to do the below string slicing operations,

1. Program should accept a string value while running
2. Find out the slice of that string after removing first and last character
3. Find out the slice of the string after removing the first 2 characters
4. Find out the slice of the string after removing the last 2 characters
5. Slice the string in the middle and display both strings.
  - a. If the length of the string is an odd number one of the slice will be one character more than the other.

```
Enter a string value:
hello
You entered : hello

Slice of 'hello' after removing first and last character 'ell'

Slice of 'hello' after removing first 2 characters 'llo'

Slice of 'hello' after removing last 2 characters 'hel'

mid index is 2

First half slice of 'hello' is 'he'
Second half slice of 'hello' is 'llo'
```

```
Enter a string value:
Python
You entered : Python

Slice of 'Python' after removing first and last character 'ytho'

Slice of 'Python' after removing first 2 characters 'thon'

Slice of 'Python' after removing last 2 characters 'Pyth'

mid index is 3

First half slice of 'Python' is 'Pyt'
Second half slice of 'Python' is 'hon'
```