Lab 6

String

Lecturer: Hussien Omer AL _ Baiti

Assign String to a Variable

- Strings in python are surrounded by either single quotation marks, or double quotation marks.

`'hello'` is the same as `"hello"`.

```
name = "ali"
print(name)
```

Accessing characters in python string

- In Python, individual characters of a String can be accessed by using the Index.
- Left to right : from 0 to infinite positive index
- Right to left : from -1 to infinite negative index return

```
name = "hussien"
print(name[0]) # returen h
print(name[4]) # returen i
print(name[-1]) # returen n
print(name[-6]) # returen u
```

String Slicing

- In Python the String Slicing way is used to access a range of characters in the String.
- Structure of slicing :

variable name [first index : last index]

Should be mines one , if you write index 5 will get index 4

- Most be first index less than last index .

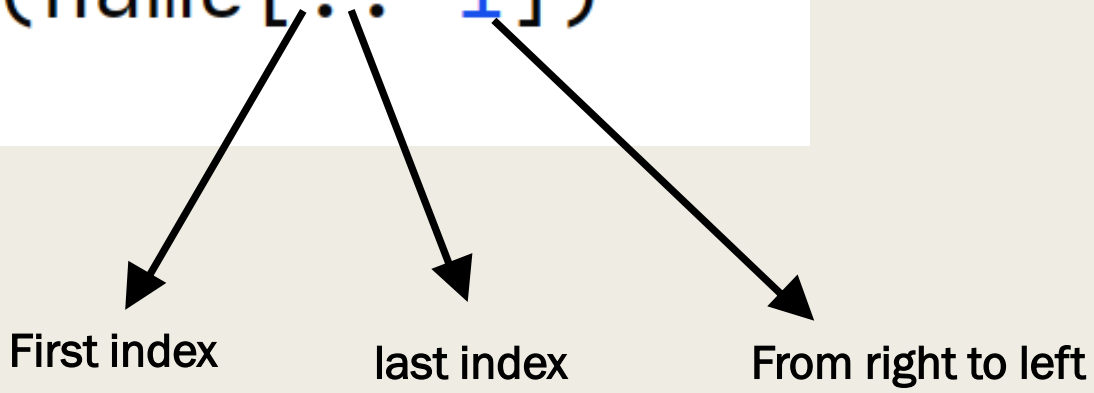
Cont..

```
name = "hussien"
print(name[1:5]) # return ussi
print(name[1:]) # return ussien
print(name[:5]) # return hussi
print(name[-1:-5]) # will not return any thing ..why ?
print(name[-5:-1]) # return ssie
print(name[:-1]) # return hussie
print(name[:-1]) # return hussie
```

Reversing a Python String

- By accessing characters from a string, we can also reverse strings in Python. We can Reverse a string by using String slicing method.

```
name = "hussien"
print(name[::-1])
```



Exercise

- Revers sub letters in string user accepted .

```
name = "python is programming language"
x = name[1:10]
print("befor revers",x)
x = x[::-1]
print("after revers",x)
```

Exercise

- What you understand from this program ?

```
name = "python is programming language"
print(name[1:10:2])
```

```
C:\Users\SuperLap\PycharmPro
yhni
```

Formatting of Strings

- Strings in Python can be formatted with the use of format() method which is a very versatile and powerful tool for formatting Strings. Format method in String contains curly braces { } as placeholders which can hold arguments according to position or keyword to specify the order.

```
name = "my age is {} i am from yemen "
age = int (input("enter your age"))
print(name.format(age))
```

Cont.

```
name = "my age is {} i am from yemen "
print(name.format(int (input("enter your age"))))
```

```
name = "ali age is {} and omer age is {}  "
omer = 20
ali = 26
print(name.format(ali , omer))
```

```
name = "ali age is {0} and omer age is { 1 }  "
omer = 20
ali = 26
print(name.format(ali , omer))
```

```
name = "my age is {} i am from yemen "
print(name.format(int (input("enter your age"))))
```

```
name = "ali age is {} and omer age is {}  "
omer = 20
ali = 26
print(name.format(ali , omer))
```

```
name = "ali age is {0} and omer age is { 1 }  "
omer = 20
ali = 26
print(name.format(ali , omer))
```

```
name = "ali age is {1} and omer age is { 0 }  "
omer = 20
ali = 26
print(name.format(ali , omer))
```

split a string

- For example, we have a comma-separated list of items from a file and we want individual items in an array.

```
name = "py,t,ho,n "
print(name.split(","))
```

```
C:\Users\SuperLap\PycharmPro
['py', 't', 'ho', 'n ']
```

Length of string

- If we need to know number of string , we will use len ( ) method

```
name = "python"
print(len(name))
```


GOOD LUCK