Python Assignment -1

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1. **State differences between Python 2 and Python 3 version**

Answer:
The differences between python 2 and python 3 are as follows:

Python 2:

- In python 2 the syntax is difficult to understand.
- Here, storing is used to define Unicode string value with “u”.
- The value of global variable will be changed while using inside for-loop.
- In Python 2 print function brackets are optional.
- The range () is used for iterations.

Python 3:

- The syntax is simple and easy to understand.
- The String is Unicode by Default.
- Here the value of variables never changes.
- Print () function brackets are compulsory.
- It offers range () functions to perform the iterations.

Comparatively, I can say that python 3 is faster than python 2.

2. **Write a python program for the following:**
   –Input the string “Python” as a list of characters from console, delete at least 2 characters, reverse the resultant string and print it.
   - **Sample input:**
   - **Python**
   - **Sample output:**
   - **ntyp**

Solution: Code:

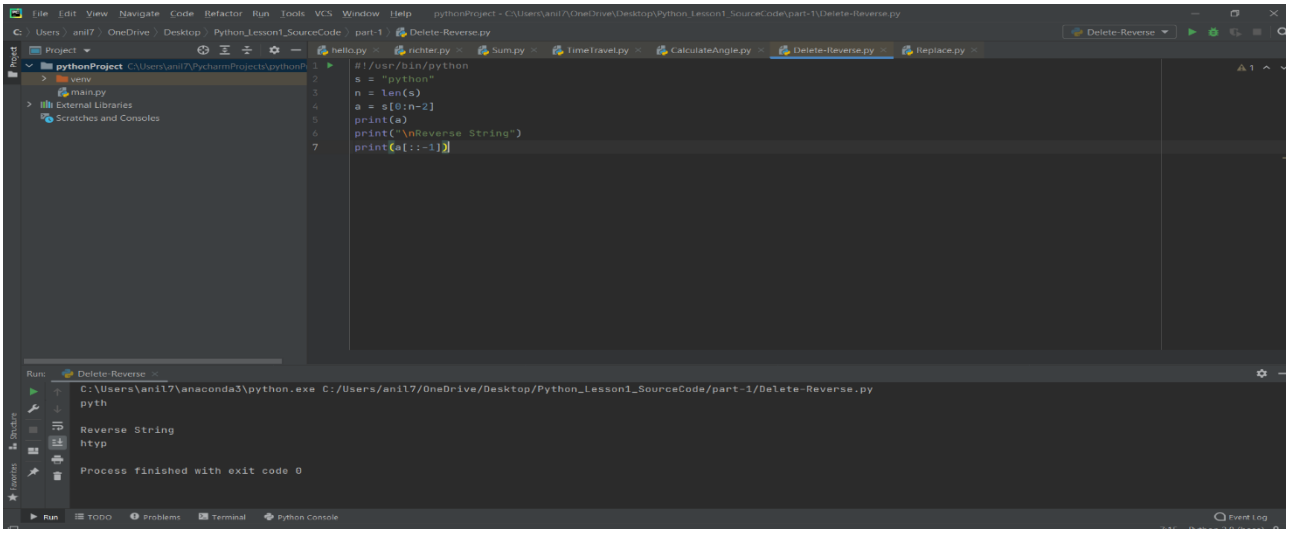
Screenshot :1

```
#!/usr/bin/python
s = "python"
n = len(s)
a = s[0:n-2]
print(a)
print("\nReverse String")
print(a[::-1])
```

Here I have taken Input ‘S’ (String) as Python. And taken a variable ‘n’ as Length

A = s [0: n-2]. By printing the variable ‘a’ I got the result as follows

Displayed output is the below screenshot:
Screenshot: 2



3. **Write a program that accepts a sentence and replace each occurrence of ‘python’ with ‘pythons’ without using regex**
    - **Sample input:**
    - **I love playing with python**
    - **Sample output:**
    - **I love playing with pythons**

Solution: Here I have taken the sample input as I love Playing Python. And taken a variable x as replacing python as Pythons. Then by printing the X. I got the Output as I love playing with pythons.

Screenshot: 3

```
#!/usr/bin/python
abc = "I love playing with python"
x = abc.replace("python", "pythons")
print(x)
```

The Displayed output is the below screenshot:

Screenshot :4