Malaluan, Nervin C. BSCS-3C

Assignment #3

Kindly research and if possible try to use the Jupyter Notebook:

Creating a String:

You can enclose text in single (') or double quotes (") to create a string.
Use triple quotes (''' or """) for multi-line strings:

```
my_string = "Hello, world!"   # Single quotes
another_string = 'This is a string'  # Double quotes
multiline_string = """This is a
multiline string"""
```

Accessing Characters in the String:

Strings behave like sequences. You can access individual characters using zero-based indexing within square brackets ([]):

```
first_char = my_string[0]  # 'H'
last_char = my_string[-1]  # '!' (negative indexing starts from the end)
```

Removing Space from a String:

There are multiple ways to remove spaces from a string:

strip() method: Removes leading and trailing whitespace (spaces, tabs, newlines):

```
my_string_with_spaces = "   Hello, world!   "
trimmed_string = my_string_with_spaces.strip()  # "Hello, world!"
```

replace() method: Replaces all occurrences of a substring:

```
spaced_string = "This has spaces"
no_spaces_string = spaced_string.replace(" ", "")  # "Thishasspaces"
```

Python String Methods:

Python offers a rich set of string methods for various manipulations.
Some examples:

upper(): Converts all characters to uppercase.
lower(): Converts all characters to lowercase.
capitalize(): Converts only the first character to uppercase.
find(substring): Returns the index of the first occurrence of the substring (or -1 if not found).
split(separator): Splits the string into a list based on the separator.
join(iterable): Joins elements of an iterable (like a list) into a string with the separator in between.

Using Jupyter Notebook:

1. Launch Jupyter Notebook:

The specific instructions to launch Jupyter Notebook depend on your environment. You might find it pre-installed or need to install it using pip install jupyter.
Once installed, open a terminal or command prompt and run jupyter notebook. This will typically launch the notebook interface in your web browser (usually at http://localhost:8888).

2. Open a Notebook File:

The Jupyter Notebook interface allows you to create new notebooks or open existing ones.
To open an existing notebook file (.ipynb extension), click the "File" menu and navigate to the file's location.

3. Start Writing a Jupyter Notebook:

Example Usage:

A Jupyter Notebook consists of cells.
Click on a new cell and select "Code" from the dropdown menu above the cell to write Python code.
Execute code by pressing Shift+Enter or clicking the "Run" button in the toolbar.
You can also create "Markdown" cells for text formatting, explanations, and rich content.

```
# Create a string
my_string = "This is a string with spaces"

# Access characters
first_char = my_string[0]  # 'T'
last_char = my_string[-1]  # 'g'
```

```
# Remove spaces
no_spaces_string = my_string.replace(" ", "")

# Use string methods
upper_string = my_string.upper()
split_list = my_string.split(" ")

# Print results using Markdown
print("Original string:", my_string)
print("First character:", first_char)
print("Last character:", last_char)
print("String without spaces:", no_spaces_string)
print("String in uppercase:", upper_string)
print("String split into list:", split_list)
```