Programming Fundamentals

Python String Practice Exercises

Target String - `Python 3.x Programming for Data Science & ML.`

Exercise 1:

Write a program that displays "Python 3.x Programming for Data Science & ML." stored in a string variable name.

In [1]:

```
x = "Python 3.x Programming for Data Science & ML."
```

In [2]:

```
print(x)
```

```
Python 3.x Programming for Data Science & ML.
```

Exercise 2:

Write a program that displays "Python 3.x Programming for Data Science" stored in a existing string variable name.

In [3]:

```
x = "Python 3.x Programming for Data Science"
```

In [4]:

```
print(x)
```

```
Python 3.x Programming for Data Science
```

Exercise 3:

Write a program that displays the type of a existing string variable name.

In [6]:

```
print(type(x))
```

```
<class 'str'>
```

Exercise 4:

Write a program to calculate the length of a existing string variable name.

In [7]:

```
len(x)
```

Out[7]:

```
39
```

Exercise 5:

Target String - Python 3.x Programming for Data Science & ML.

Expected Result - Python

In [8]:

```
x = "Python 3.x Programming for Data Science & ML."
```

In [12]:

```
print(x.split(' ')[0])
```

```
Python
```

In [ ]:

```

```

Exercise 6:

Target String - Python 3.x Programming for Data Science & ML.

Expected Result - Programming for Data Science & ML.

In [1]:

```
x = "Python 3.x Programming for Data Science & ML."
```

In [3]:

```
print(x[11:])
```

```
Programming for Data Science & ML.
```

Exercise 7:

Target String - Python 3.x Programming for Data Science & ML.

Expected Result - Python 3.x Programming for Data Science

In [16]:

```
x = 'Python 3.x Programming for Data Science & ML.'
```

In [18]:

```
print(x[:-5])
```

```
Python 3.x Programming for Data Science
```

Exercise 8:

Target String - Python 3.x Programming for Data Science & ML.

Expected Result - ML

In [19]:

```
x = 'Python 3.x Programming for Data Science & ML.'
```

In [23]:

```
print(x[-3:])
```

```
ML.
```

Exercise 9:

Target String - Python 3.x Programming for Data Science & ML.

Expected Result - .LM & ecneicS ataD rof gnimmargorP x.3 nohtyP

In [24]:

```
x = "Python 3.x Programming for Data Science & ML."
```

In [25]:

```
x[::-1]
```

Out[25]:

```
'.LM & ecneicS ataD rof gnimmargorP x.3 nohtyP'
```

In [ ]:

```

```

Exercise 10:

Target String - Python 3.x Programming for Data Science & ML.

Expected Result - python 3.x programming for data science & ml.

In [26]:

```
x = 'Python 3.x Programming for Data Science & ML.'
```

In [27]:

```
x.lower()
```

Out[27]:

```
'python 3.x programming for data science & ml.'
```

Exercise 11:

Target String - Python 3.x Programming for Data Science & ML.

Expected Result - PYTHON 3.X PROGRAMMING FOR DATA SCIENCE & ML.

In [28]:

```
x.upper()
```

Out[28]:

```
'PYTHON 3.X PROGRAMMING FOR DATA SCIENCE & ML.'
```

Exercise 12:

Target String - Python 3.x Programming for Data Science & ML.

Expected Result - Python 3.x programming for data science & ml.

In [29]:

```
x = "Python 3.x Programming for Data Science & ML."
```

In [30]:

```
x.capitalize()
```

Out[30]:

```
'Python 3.x programming for data science & ml.'
```

Exercise 13:

Target String - Python 3.x Programming for Data Science & ML.

Expected Result - Python 3.X Programming For Data Science & Ml.

In [32]:

```
x = "Python 3.x Programming for Data Science & ML."
```

In [33]:

```
x.title()
```

Out[33]:

```
'Python 3.X Programming For Data Science & Ml.'
```

Exercise 14:

Target String - Python 3.x Programming for Data Science & ML.

Count Total P

In [34]:

```
x
```

Out[34]:

```
'Python 3.x Programming for Data Science & ML.'
```

In [35]:

```
x.count('P')
```

Out[35]:

```
2
```

Exercise 15:

Target String - Python 3.x Programming for Data Science & ML.

Change Data Science with AI

In [36]:

```
x = "Python 3.x Programming for Data Science & ML."
```

In [37]:

```
x.replace("Data Science", "AI")
```

Out[37]:

```
'Python 3.x Programming for AI & ML.'
```

Exercise 16:

Target String - Python 3.x Programming for Data Science & ML.

Expected Result - ['Python', '3.x', 'Programming', 'for', 'Data', 'Science', '&', 'ML.']

In [38]:

```
x = "Python 3.x Programming for Data Science & ML."
```

In [39]:

```
x.split()
```

Out[39]:

```
['Python', '3.x', 'Programming', 'for', 'Data', 'Science', '&', 'ML.']
```

Exercise 17:

Target String - Python 3.x Programming for Data Science & ML.

Expected Result - Python_3.x_Programming_for_Data*Science*&_ML.

In [40]:

```
x = "Python 3.x Programming for Data Science & ML."
```

In [41]:

```
x.replace(" ", "_")
```

Out[41]:

```
'Python_3.x_Programming_for_Data_Science_&_ML.'
```

Exercise 18:

Target String - Python 3.x Programming for Data Science & ML.

Find Position of ML

In [42]:

```
x = "Python 3.x Programming for Data Science & ML."
```

In [47]:

```
x.find("ML")
```

Out[47]:

```
42
```

In [4]:

```
# x.index("ML")
```

Exercise 19:

Target String - Python 3.x Programming for Data Science & ML.

Expected Result - Python3.XProgrammingForDataScience&Ml.

In [48]:

```
x = "Python 3.x Programming for Data Science & ML."
```

In [50]:

```
x.title().replace(" ", "")
```

Out[50]:

```
'Python3.XProgrammingForDataScience&Ml.'
```

Exercise 20:

Target String - Python 3.x Programming for Data Science & ML.

Check ML existing in target string

In [51]:

```
x = "Python 3.x Programming for Data Science & ML."
```

In [54]:

```
"ML" in x
```

Out[54]:

```
True
```

Exercise 21:

Display Python five times

In [55]:

```
print("Python " * 5)
```

```
Python Python Python Python Python
```

In [56]:

```
x
```

Out[56]:

```
'Python 3.x Programming for Data Science & ML.'
```

In [61]:

```
print(x[:7] * 5)
```

```
Python Python Python Python Python
```

Exercise 22:

Target String - 33103-0000000-1

Expected Result - ['33103', '0000000', '1']

In [62]:

```
x = "33103-0000000-1"
```

In [63]:

```
x.split("-")
```

Out[63]:

```
['33103', '0000000', '1']
```

Exercise 23:

Target -

Name: Ahmad

Course: AI/AP

Learning Speed: 95%

Expected Result - My Info - Name : Ahamd, Course : AP/AP, Learning Speed : 95%

In [66]:

```
name = "Ahmad"
```

```
name = "Ahmad"
course = "AP/AP"
learning_speed = 95
```

In [67]:

```
print(f"My Info - Name : {name}, Course : {course}, Learning Speed : {learning_speed}%")
```

```
My Info - Name : Ahmad, Course : AP/AP, Learning Speed : 95%
```

Exercise 24:

Target String - Python 3.x Programming for Data Science & ML.

Expected Result -

Python

3.x

Programming

for

Data Science

&

ML

In [68]:

```
x = "Python 3.x Programming for Data Science & ML."
```

In [72]:

```
print(x.replace(" ", "\n"))
```

```
Python
3.x
Programming
for
Data
Science
&
ML.
```

Exercise 25:

Display the following output:

C:\Users\MRizwan>

In [5]:

```
print('C:\\Users\\MRizwan>')
```

```
C:\Users\MRizwan>
```

Exercise 26:

Write a program that stored first name and last name in two strings, concatenate both strings in third string and then displays it.

Expected Ouput - Your full name is : M.Rizwan Mughal

In [3]:

```
first_name = "M."
```

```
last_name = "Rizwan"
full_name = first_name + " " + last_name
```

In [4]:

```
print(f'Your full name is : {full_name}')
```

```
Your full name is : M. Rizwan
```

In [ ]:

```

```

Happy Learning 😊