String is a sequence of character

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

In Python, string is an immutable sequence data type.

In [1]:

```python
str1='This is a string in Python'
print(str1)
```

This is a string in Python

In [2]:

```python
len(str1)
```

Out[2]:

26

In [3]:

```python
str2="This is a string in Python"
print(str2)
```

This is a string in Python

In [4]:

```python
#Multi-line strings must be embed in triple quotes, as shown below.

str1='''This is
the first
Multi-line string.
'''
print(str1)
```

This is
the first
Multi-line string.

In [5]:

```python
str5="""This is
the second
Multi-line
string."""
print(str5)
```

```
This is
the second
Multi-line
string.
```

In [6]:

```python
str1='Welcome to "Python Tutorial" at DeveLearn'
print(str1)
```

```
Welcome to "Python Tutorial" at DeveLearn
```

In [7]:

```python
str2="Welcome to 'Python Tutorial' on at DeveLearn"
print(str2)
```

```
Welcome to 'Python Tutorial' on at DeveLearn
```

In [8]:

```python
greet='Hello'
len(greet)
5
```

Out[8]:

```
5
```

In [9]:

```python
#positive indexing
greet='hello'
greet[0]
```

Out[9]:

```
'h'
```

In [10]:

```python
greet[5]
```

```
---------------------------------------------------------------------------
IndexError                                Traceback (most recent call last)
~\AppData\Local\Temp/ipykernel_27288/1031943716.py in <module>
----> 1 greet[5]

IndexError: string index out of range
```

In [11]:

```python
#negative indexing
greet='hello'
greet[-5]
```

Out[11]:

```
'h'
```

In [12]:

```python
#unmutable object hence it is not possible to modify it.
greet='hello'
greet[0]='A'
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
~\AppData\Local\Temp/ipykernel_27288/3542102789.py in <module>
      1 #unmutable object hence it is not possible to modify it.
      2 greet='hello'
----> 3 greet[0]='A'

TypeError: 'str' object does not support item assignment
```

In [13]:

```python
greet='hello'
type(greet)
```

Out[13]:

```
str
```

In [14]:

```python
str2="Welcome to 'Python Tutorial' at DeveLearn"
str2[-10]
```

Out[14]:

```
' '
```

In [15]:

```python
greet[1:5]
```

Out[15]:

```
'ello'
```

In [16]:

```python
str2 = "Welcome to DeveLearn"
str2[0:8]
```

Out[16]:

```
'Welcome '
```

In [17]:

```python
str2[4:9]
```

Out[17]:

```
'ome t'
```

In [18]:

```python
str2[1:-1]
```

Out[18]:

```
'elcome to DeveLear'
```

In [19]:

```python
str2[-20:30]
```

Out[19]:

```
'Welcome to DeveLearn'
```

In [20]:

```python
str2[-1:1:-1]
```

Out[20]:

```
'nraeLeveD ot emocl'
```

In [21]:

```python
str2="Welcome to 'Python Tutorial' at DeveLearn"
str2[1:8:2]
```

Out[21]:

```
'ecm '
```

In [22]:

```python
str2[-1:]
```

Out[22]:

```
'n'
```

In [23]:

```python
str2[:-1]
```

Out[23]:

```
"Welcome to 'Python Tutorial' at DeveLear"
```

In [24]:

```python
str2="Welcome to 'Python Tutorial' on at DeveLearn"
len(str2)
```

Out[24]:

```
44
```

In [25]:

```python
i=1
```

In [26]:

```python
str2[-1::-1]
```

Out[26]:

```
"nraeLeveD ta no 'lairotuT nohtyP' ot emocleW"
```

In [27]:

```python
str2[-3:-8:-2]
```

Out[27]:

```
'aLv'
```

String Functions

lower()

upper()

title()

capitalize()

In [28]:

```python
a = "My Name Is Sanvee"
a.lower()
```

Out[28]:

```
'my name is sanvee'
```

In [29]:

```python
a.count('e')
```

Out[29]:

```
3
```

In [30]:

```python
a.swapcase()
```

Out[30]:

```
'mY nAME iS sANVEE'
```

In [31]:

```python
a1 = 'Hi'
a1.center(6)
```

Out[31]:

```
'  Hi  '
```

In [32]:

```python
a.split()
```

Out[32]:

```
['My', 'Name', 'Is', 'Sanvee']
```

In [33]:

```python
a.index("a",8,20)
```

Out[33]:

```
12
```

In [34]:

```python
a.upper()
```

Out[34]:

```
'MY NAME IS SANVEE'
```

In [35]:

```python
print("hello students \nwelcome to nettech")
```

```
hello students
welcome to nettech
```

In [36]:

```python
B = "MY NAME IS SANVEE"
```

In [37]:

```python
B.title()
```

Out[37]:

```
'My Name Is Sanvee'
```

In [38]:

```python
B.capitalize()
```

Out[38]:

```
'My name is sanvee'
```

In [ ]:

In [ ]:

In [ ]: