

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 [60]:

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

This is a string in Python

In [61]:

```
len(str1)
```

Out[61]:

26

In [62]:

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

This is a string in Python

In [63]:

*#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 [64]:

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

This is  
the second  
Multi-line  
string.

In [65]:

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

Welcome to "Python Tutorial" at NetTech

In [66]:

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

Welcome to 'Python Tutorial' on at NetTech

In [67]:

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

Out[67]:

5

In [69]:

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

Out[69]:

'h'

In [70]:

```
greet[5]
```

```
-----  
IndexError                                Traceback (most recent call last)  
<ipython-input-70-92e7014796c6> in <module>()  
----> 1 greet[5]
```

IndexError: string index out of range

In [71]:

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

Out[71]:

'h'

In [72]:

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

```
-----  
TypeError                                Traceback (most recent call last)  
<ipython-input-72-b51ef677656f> in <module>()  
      1 #immutable 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 [73]:

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

Out[73]:

str

In [81]:

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

Out[81]:

'a'

In [82]:

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

Out[82]:

'ello'

In [83]:

```
str2[0:7]
```

Out[83]:

'Welcome'

In [84]:

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

Out[84]:

'ome t'

In [85]:

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

Out[85]:

```
"elcome to 'Python Tutorial' at NetTec"
```

In [86]:

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

Out[86]:

```
''
```

In [88]:

```
str2="Welcome to 'Python Tutorial' on at NetTec"
```

```
str2[1:8:2]
```

Out[88]:

```
'ecm '
```

In [89]:

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

Out[89]:

```
'h'
```

In [ ]:

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

In [114]:

```
str2="Welcome to 'Python Tutorial' on at NetTec"
```

```
len(str2)
```

Out[114]:

```
42
```

In [111]:

```
i=1
```

Out[111]:

```
'0b1011001'
```

In [ ]:

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

In [95]:

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

Out[95]:

```
'etN'
```

###String Functions lower()

upper()

title()

capitalize()

In [115]:

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

Out[115]:

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

In [116]:

```
a.upper()
```

Out[116]:

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

In [129]:

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

```
hello students
```

```
welcome to nettech
```

In [117]:

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

In [118]:

```
B.title()
```

Out[118]:

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

In [119]:

```
B.capitalize()
```

Out[119]:

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

In [ ]: