

```
In [ ]: String = > String is sequence of characters
```

- 1- String is immutable
- 2- Indexed start with zero.
- 3- It can be loop through

Charat

```
In [2]: # loop through
for i in "john":
    print(i)
```

j
o
h
n

```
In [ ]: # Characteristics
```

- 1- String literals : single quote , double quote and triple quotes
- 2- support unicode charaters
- 3- string is usages "regex"
- 4- It can also use f-string formatting

```
In [10]: # string creation
```

```
name = "John"
message= 'hello world'
mutli_line = """ This is a
                multi string lines"""

# string operations
first_name = "amit"
last_name = "Jadhav"

full_name = first_name + " " + last_name
print(full_name)

repeat_names = "Hellllo " * 5
print(repeat_names)
```

amit Jadhav
Helllo Hellllo Hellllo Hellllo Hellllo

```
In [23]: # string indexing and slicing
```

```
text = "Python Programming"
# indexing is always start with zero
print(text[0])
print(text[17])
print(text[-1])
print(text[-2])
print(text[-8])
```

```
## slicing
print(text[0:5])
print(text[2:5])
print(text[:-1])
print(text[-1:])

# palindrome

text[::-1]
```

```
P
g
g
n
g
Pytho
tho
Python Programmin
g
```

Out[23]: 'gnimmargorP nohtyP'

```
In [44]: # string methods
t = "python is awesome language"
print(f"length : {len(t)}")
print(f"upper : {t.upper()}")
print(f"lower : {t.lower()}")
print(f"capitalize : {t.capitalize()}")
print(f"title : {t.title()}")
print(f"split : {t.split(" ")}")
print(f"max : {max(t)}")
print(f"startswith : {t.startswith('py')}")
print(f"startswith : {t.find('is')}")
```

```
length : 26
upper : PYTHON IS AWESOME LANGUAGE
lower : python is awesome language
capitalize : Python is awesome language
title : Python Is Awesome Language
split : ['python', 'is', 'awesome', 'language']
max : y
startswith : True
startswith : 7
```

In []: