

Indexing

```
In [5]: # make a string  
  
a="Muhammad Shahzeb"  
a
```

```
Out[5]: 'Muhammad Shahzeb'
```

```
In [6]: a[0]
```

```
Out[6]: 'M'
```

```
In [7]: a[4]
```

```
Out[7]: 'm'
```

```
In [8]: # Length of a strings  
len(a)
```

```
Out[8]: 16
```

```
In [9]: # as there are 16 characters so its start from 0 to 15  
# so it gives error in 16  
a[16]
```

```
-----  
IndexError                                Traceback (most recent call last)  
<ipython-input-9-1dd8e9a601cb> in <module>  
      1 # as there are 16 characters so its start from 0 to 15  
      2 # so it gives error in 16  
----> 3 a[16]  
  
IndexError: string index out of range
```

```
In [10]: a[15]
```

```
Out[10]: 'b'
```

```
In [11]: # to select specific characters from a strings  
a[1:4]
```

```
Out[11]: 'uha'
```

```
In [12]: a[1::5]
```

```
Out[12]: 'uaa'
```

```
In [15]: # last character is exclusive if we want to print whole strings than we need to add 1 in  
a[0:15]  
a[0:16]
```

```
Out[15]: 'Muhammad Shahzeb'
```

```
In [16]: # double ratio shows the starting and ending of a strings like My name is start from m an  
a[0::15]
```

```
Out[16]: 'Mb'
```

```
In [18]: # starting from the right side of a strings used to get the last or second and so charac  
a[-1]
```

```
Out[18]: 'b'
```

```
In [24]: a[-7:16]
```

```
Out[24]: 'Shahzeb'
```

Strings methods

```
In [25]: friends="osama shoaib abdul"
```

```
In [26]: friends
```

```
Out[26]: 'osama shoaib abdul'
```

```
In [27]: len(friends)
```

```
Out[27]: 18
```

```
In [41]: # some built in methods to works with strings  
# Capitalize  
friends.capitalize()
```

```
Out[41]: 'Osama shoaib abdul'
```

```
In [42]: # Lowercase  
friends.lower()
```

```
Out[42]: 'osama shoaib abdul'
```

```
In [38]: # uppercase  
friends.upper()
```

Out[38]: 'OSAMA SHOAIAB ABDUL'

In [46]: *# replace a specific character in strings*
`friends.replace("o","u")`

Out[46]: 'usama shuaib abdul'

In [47]: `name="Muhammad Shahzeb Arshad"`
`name`

Out[47]: 'Muhammad Shahzeb Arshad'

In [57]: *# counting a specific alohabet in a string*
`name.count("a")`

Out[57]: 2

In [62]: `name.count("S")`

Out[62]: 1

In [63]: *# for multiple character*
`name.count("ad")`

Out[63]: 2

finding an index number in string

In [67]: *# finding index in a sring*
`friends.find("s")`

Out[67]: 1

In [68]: *# now if we want to find shoib in friends we will use s to find index number but s is lar*
now the solution is simple just use starting two or three characters of any name you wa
`friends.find("sh")`

Out[68]: 6

In [69]: `friends.find("ib")`

Out[69]: 10

In [73]: `friends[5:12]` *#always add number of charctars in output index number*

Out[73]: ' shoaib'

Splitting strings

```
In [74]: # we can split long strings for devide and conquer type of processings  
friends.split()
```

Out[74]: ['osama', 'shoaib', 'abdul']