Python for Data Analytics Learn everything about analytics



Scenario

Imagine storing the Marks of all the students of class 10th Roll Number wise.

Variables

 $Roll_{no_1} = 45$

Roll_no_2 = 56

 $Roll_{no_3} = 35$

.....

.....





Scenario

Reasons why Variables are not a good solution to our problem?

- 1. Large number of Variables for large number of students in class.
- 2. What is the average marks of the last five students?
- Learn everything about analytics 3. Marks of the student 3 roll numbers after 45.

List



List Overview

Topics that we will be covering

- 1. What is a List?
- 2. Sub-setting a list

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- 3. Adding elements to an existing Listearn everything about analytics
- 4. Deleting elements of a List
- 5. Looping over a list



What is a List?

A list is an ordered data structure with elements separated by comma and enclosed within square brackets.

Some examples of List -

```
1ist1=[2,3,4,5,6]

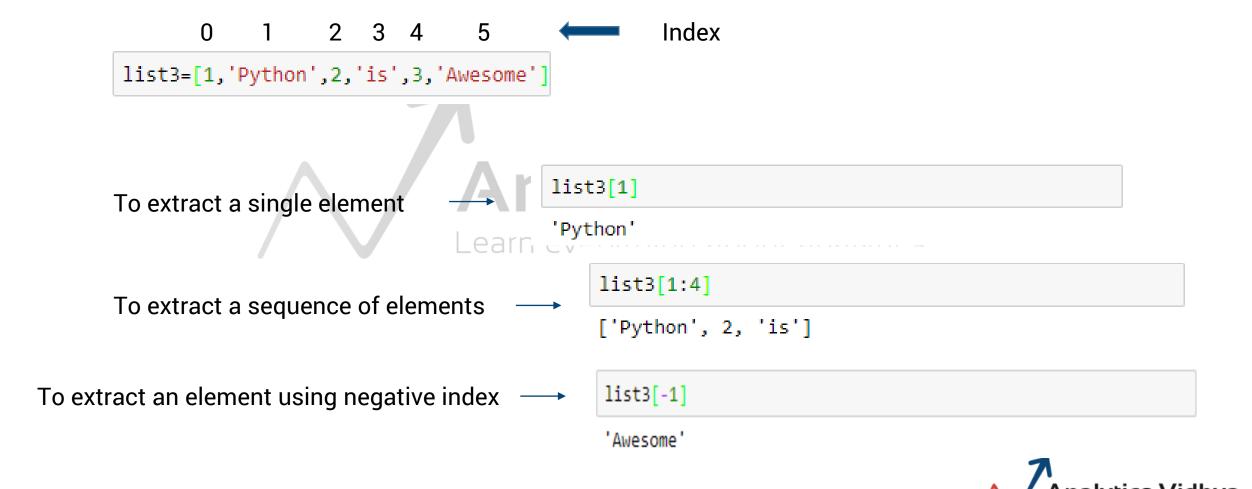
A palytics Vidhya
everythingle Data type lytics
```

```
list2=['Python','is','Awesome']
```

```
list3=[1,'Python',2,'is',3,'Awesome'] — Mix Data type
```



Sub-setting a List



Adding elements to an existing List

```
list3=[1,'Python',2,'is',3,'Awesome']
                                      list3.append(4)
Adding a single element
                                      list3
                                      [1, 'Python', 2, 'is', 3, 'Awesome', 4]
                                       list3.extend([5,6])
Adding multiple elements
                                      list3
                                       [1, 'Python', 2, 'is', 3, 'Awesome', 4, 5, 6]
```



Adding elements to an existing List

```
list3=[1,'Python',2,'is',3,'Awesome']

list3.append([7,8])

list3

[1, 'Python', 2, 'is', 3, 'Awesome', [7, 8]]
```



Deleting elements of a List

```
list3=[1,'Python',2,'is',3,'Awesome']
```

Deleting an element by value

```
list3.remove(2)
```

list3

[1, 'Python', 'is', 3, 'Awesome']

```
Deleting an element by index —
```

```
del list3[3]
```

list3

[1, 'Python', 2, 3, 'Awesome']



Looping over a List

```
list3=[1,'Python',2,'is',3,'Awesome']
```

Awesome

```
Printing each element of a list Learn everything
```

```
for i in list3:
    print(i)

1
Python
2
is
```





