List Data Structure

If we want to represent a group of individual objects as a single entity where insertion order preserved and duplicates are allowed, then we should go for List.

insertion order preserved.
duplicate objects are allowed
heterogeneous objects are allowed.
List is dynamic because based on our requirement we can increase the size and decrease the size.
In List the elements will be placed within square brackets and with comma seperator.

We can differentiate duplicate elements by using index and we can preserve insertion order by using index. Hence index will play very important role.
Python supports both positive and negative indexes. +ve index means from left to right where as negative index means right to left

[10,"A","B",20, 30, 10]

-6	-5	-4	-3	-2	-1
10	A	B	20	30	10
0	1	2	3	4	5

List objects are mutable.i.e we can change the content.

Creation of List Objects:

1. We can create empty list object as follows...

```
1)  list=[]
2)  print(list)
3)  print(type(list))
4)
5)  []
6)  <class 'list'>
```

2. If we know elements already then we can create list as follows
list=[10,20,30,40]