

```
In [1]: #creation of lists
#creating an empty list
list = []
#creating a list with elements
num = [1,2,3,4,5,6]
anime_names = ["Naruto", "Levi", "Light Yagami", "Tanjiro"]
mix = [6,4.8,"Nezuko","Akaza"]
print(type(mix))
print(type(num))
```

```
<class 'list'>
<class 'list'>
```

```
In [3]: #Access list elements
Sports = ["Tennis", "Football", "Cricket", "Hockey", "Volleyball"]
print(Sports[2])
print(Sports[-4])
```

```
Cricket
Football
```

```
In [7]: #Slicing of a list
slice = ['l', 'a', 'r', 'g', 'e', 's', 't', 'a', 'n', 'i', 'm', 'a', 'l']
n = len(slice)
print(slice[2:n-1])
print(slice[:5])
print(slice[3:])
print(slice[:])
```

```
['r', 'g', 'e', 's', 't', 'a', 'n', 'i', 'm', 'a']
['l', 'a', 'r', 'g', 'e']
['g', 'e', 's', 't', 'a', 'n', 'i', 'm', 'a', 'l']
['l', 'a', 'r', 'g', 'e', 's', 't', 'a', 'n', 'i', 'm', 'a', 'l']
```

```
In [9]: #list operations
#concatenation
a = [1,8.3,"sum"]
b = [0,"lift",2.44,7]
print("conc :", a+b)

#repetition
a = [7,8,4]
print("rep :", a*4)
```

```
conc : [1, 8.3, 'sum', 0, 'lift', 2.44, 7]
rep : [7, 8, 4, 7, 8, 4, 7, 8, 4, 7, 8, 4]
```

```
In [3]: #Change list items
lst = ["Goa", "Kerala", "Kochi", "Mumbai"]
lst[2] = "Hyderabad"
print(lst)
lst[:3] = ["Chennai", "Ooty","Bihar"]
print(lst)
```

```
['Goa', 'Kerala', 'Hyderabad', 'Mumbai']
['Chennai', 'Ooty', 'Bihar', 'Mumbai']
```

```
In [27]: #List methods
#append()
num = [1,2,3]
num.append(10)
print("append:",num)

#extend()
num = [5,6,7,8,9]
extra_num = [10,11,12,13,14,15]
num.extend(extra_num)
print("extend:",num)

#Insert()
num = [22,33,"siri",4.5]
num.insert(3,"pooja")
print("insert:",num)

#remove()
num = [1,2,3,4,5,2,3,6,7,4,7,5,7,7,3]
num.remove(7)
print("remove:",num)

#pop()
num = [1,3,5,7,9,10,2,34,55]
popped_value = num.pop()
print("pop:",popped_value)

#Index()
num = [1,2,3,4,5,2,3,6,7,4,7,5,7,7,3]
element = num.index(7)
print("index:",element)

#count()
num = [1,2,3,4,5,2,3,6,7,4,7,5,7,7,3]
num.count(5)
print("count:",num)

#sort()
num = [1,3,5,7,9,10,2,34,55]
num.sort()
print("sort:",num)

birds = ["swan", "HummingBird", "Parrot", "DoVe", "owl", "peacock"]
birds.sort()
print("sort:",birds)

#reverse()
list = [4,2,6,1,7,9]
list.reverse()
print("reverse:",list)

#clear()
list = [4,2,6,1,7,9]
list.clear()
print("clear:",list)

#copy()
list = [22,33,"siri",4.5]
a = list.copy()
print("copy:",a)
```

```
append: [1, 2, 3, 10]
extend: [5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15]
insert: [22, 33, 'siri', 'pooja', 4.5]
remove: [1, 2, 3, 4, 5, 2, 3, 6, 4, 7, 5, 7, 7, 3]
pop: 55
index: 8
count: [1, 2, 3, 4, 5, 2, 3, 6, 7, 4, 7, 5, 7, 7, 3]
sort: [1, 2, 3, 5, 7, 9, 10, 34, 55]
sort: ['DoVe', 'HummingBird', 'Parrot', 'owl', 'peacock', 'swan']
reverse: [9, 7, 1, 6, 2, 4]
clear: []
copy: [22, 33, 'siri', 4.5]
```

```
In [ ]:
```