

## II. LIST operation in Python DSA.

List is mutable data structure (Value can be change)

[ ] ← notation of list

Eg → [1, "s", 2.3] → Heterogeneous Data Structure.

→ How to create list?

→ list\_of\_fruits = []

list = [1, 2, 3, True, False, "Aryan"]

# This is list

print(type(list\_of\_fruits))

print(list)

↑  
This way  
is faster

a = 6  
original value  
changes

a = [ ]    a = [5, 6, 7, 8] ← value safe and same value.

→ create list using function?

list\_of\_names = list() ← This call the class therefore it is slow.

• Operations in list

" " " ← multi line comments syntax.

list\_of\_players = [ ]

How to add on append in list of players?

list\_of\_players.append("Virat")

→ Repeat the line to add new players in the set.

# to clear the list

list\_of\_players.clear() ← \* Clear function to clear the list.

list\_of\_nums = [1, 2, 3, 3, 4, 3, 5, 3]

list\_of\_nums.count(3) ⇒ output (4)

list\_new = [1, 2, 3] ↑ no. to be find the frequency of numbers.

# concat two list

list\_of\_nums.extend(list\_new)

How to find what all operation we can do in list?

`print(dir(list_variable))`

→ output will show me

list of operation we can do

index  
start  
with  
0

list-of-players = ["Virat", "Rohit", "Saha"]

↑                      ↓                      ↓  
0th                      1st                      last

`print(len(list-of-players))`

`print(list_variable [particular position])`

`print(list-of-players [0:3])`

slicing of  
list.

Start  
position                      End+1  
position

list only  
for loop

for player in list-of-players:  
    `print(player)`

for i in range(0, len(list-of-players))