

## Day-08

### LIST

List = ['maths', 'science', 'Tamil', 205]

(i). List.append

↳ add the value.

List.append(2005)

↳ ['maths', 'science', 'Tamil', 205, 2005]

(ii) LIST.insert

↳ elements are in specified position.

List<sup>insert</sup> = ~~List~~ ['English', 2]

↳ ['maths', 'English', 'science', 'Tamil', 205]

(iii) LIST.~~extend~~ extend

↳ we will add two list values.

append means only add the value can't add  
add List.

LIST1 = [2, 4, 5, 6]

List = extend (LIST1)

↳ [2, 4, 5, 6, 'maths', 'science', 'Tamil', 205]

(iv) sum()

List = [1, 2, 3, 4, 5]

print (sum (List))

↳ 15.

~~Condition~~ ∴ Condition: sum is only used in  
Integer values. (Numeric values).

(v). Count()

↳ calculate total occurrence of given  
element of List.

List.Count (element).

↳ How many time that element  
is came we got the output.



(X) LIST = [1, 2, 3, 4, 5, ~~6, 7, 8~~]  
POP()

↳ index is not necessary parameter, if not mentioned takes the last index.

LIST.pop(index):

print(LIST.pop()) → 5 → This is last value  
↳ index not there means print last word.

\*) LIST.pop(1) → 2

(Xi) del()

↳ del, list[index] → del and list there is not (\*) only space.

del, list(0).

print(list) =   
↳ [2, 3, 4, 5]

(Xii) remove.

list.remove(~~index~~ value) we have give the inside the list value than only

LIST.remove(3)

Print(list)

= [1, 2, 4, 5]

It will give output.

# Create empty list

my List = []

print list → []



# Nested List

$$\text{List} = [1, 2, [\text{'Car', 'bike'}], [5, 6]]$$

$$\begin{matrix} & & 2(0) & & 2(1) \\ & & \uparrow & \nearrow & \uparrow \\ & & 0 & & 1 \\ & & \downarrow & & \downarrow \\ & & 3 & & 4 \end{matrix}$$

You wanna get 2<sup>nd</sup> Car result means,

$$\text{print}(\text{List}[2][0])$$

↳ 'Car' →

# Index value

$$\text{List} = [10, 25, 30, 36, 41, 48]$$

$$\text{print}(\text{List}[-1])$$

↳ 48

(-) means output is start from last.

$$\text{print}(\text{List}[::-1])$$

↳ [48, 41, 36, 30, 25, 10]

(::) it will be print start from first.

$$\text{print}(\text{List}[4])$$

square bracket.

↳ 41.

# Slicing

$$\text{print}(\text{List}[0:2])$$

it will be print. (0:2-1)

↳ [10, 25]

$$\text{print}(\text{List}[:5])$$

↳ [10, 25, 30, 36, 41]

↳ there is no starting index means it will be print from the start ~~and~~ till mention end.



● `print (List [2:])`

↳ `[36, 41, 48.]`

∴ it will be print after the index 2 values.

`print (List [::2])`

↳ `[10, 30, 41]`.

(and)

`print (List [:13])`,

↳ `[10, 36]`

# `list . sort ()`

`print (list)`.

`list.sort (reverse = True)`

`print (list)`.

↓

`myList = list . copy ()`.

`print (myList)`

# List to dictionary

`list1 = [1, 2, 3, 4]`.

`list2 = ['Jaddu', 'kali', 'Dhoni']`

`dictionary = dict [zip (list1, list2)]`.

# Change to tuple

`list = tuple (list)`

↳ `print (list)`.

↳ we get a result in tuple datatype.



dayo8\_example.py X excrsice.py

vs code &gt; dayo8\_example.py &gt; ...

```
1 #index and slicing method in list
2 from copy import copy
3
4
5 list=[2,3,5,6,4,87,45]
6 print(list[2])
7 print(list[-1])
8 print(list[1:5])
9 print(list[:5])
10 print(list[2:])
11 print(list[::2])
12 #append and extend method in list
13 list1=['apple','orange']
14 list.extend(list1)
15 print(list)
16 list.append(5)
17 print(list)
18 print(list.count(5))
19 #insert,pop and remove method in list
20 list.insert(1,'cherry')
21 print(list)
22 print(list.pop(1))
23 list.remove('apple')
```



PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
5
45
[3, 5, 6, 4]
[2, 3, 5, 6, 4]
[5, 6, 4, 87, 45]
[2, 5, 4, 45]
[2, 3, 5, 6, 4, 87, 45, 'apple', 'orange']
[2, 3, 5, 6, 4, 87, 45, 'apple', 'orange', 5]
```

+ ^ v x

powershell  
Python  
Python Deb...

[illegible] $+$   $\vee$   $\wedge$   $\times$ 

- powershell
- Python
- ⊗ Python Deb.

dayo8\_example.py X excrsice.py

vs code &gt; dayo8\_example.py &gt; ...

```
24 print(list)
25 list.reverse()
26 print(list)
27 #sort method
28 list3=[30,3,45,67,34]
29 list3.sort()
30 print(list3)
31 list3.sort(reverse=True)
32 print(list3)
33 del list3[1]
34 print(list3)
35 mylist=list3.copy()
36 print('my_list :',mylist)
37 list.clear()
38 print(list)
39 roll_no=[203,205,207,209]
40 name=['juddu','dhoni','koli']
41 dictionary=dict(zip(roll_no,name))
42 print(dictionary)
43 list5=tuple(list3)
44 print(list5)
45 list6=set(list3)
46 print(list6)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
[67, 45, 34, 30, 3]
[67, 34, 30, 3]
my_list : [67, 34, 30, 3]
[]
{203: 'juddu', 205: 'dhoni', 207: 'koli'}
(67, 34, 30, 3)
{3, 34, 67, 30}
PS C:\Users\abinaya\Desktop>
```

+ ^ ×

powershell  
Python  
Python Deb...