

Day-2.

Data types

1. List \rightarrow `[]` \rightarrow we have to use Square Bracket.

List are used to store multiple value in single variables.

List items are ordered, changeable, ~~not~~ and allow duplicate values.

The first index start in 0.

Allow Duplicate

```
list = ['apple', 'banana', 'cherry', 'apple']
```

`print(list)` \rightarrow get the output.

```
print(list[0])
```

output \rightarrow apple

```
print(list[1:3])
```

output \rightarrow banana, cherry, apple

July 2017							August 2017							September 2017						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
30	31				1			1	2	3	4	5							1	2
2	3	4	5	6	7	8	6	7	8	9	10	11	12	3	4	5	6	7	8	9
9	10	11	12	13	14	15	13	14	15	16	17	18	19	10	11	12	13	14	15	16
16	17	18	19	20	21	22	20	21	22	23	24	25	26	17	18	19	20	21	22	23
23	24	25	26	27	28	29	27	28	29	30	31			24	25	26	27	28	29	30

print (len(List)).
↳ output = 3

List = ['apple', 'banana', 'cherry', 'apple']

reverse method

is List.reverse print list reverse.
↳ output

(i) print List[::-1]

output ↳ ['apple', 'cherry', 'banana', 'apple']

(ii) List.reverse()

print (List).

↳ output.

['apple', 'cherry', 'banana', 'apple']

managing order in list.

↳ Sort

number = [2, 8, 5, 7, 4, 9, 0, 1, 25, 89, 36]

number.sort()

Print (number).

↳ output.

[0, 1, 2, 3, 4, 5, 7, 7, 25, 36, 89]

2. TUPLES. → ()

↳ we have to use ~~around~~ **Brackets**.

Tuple is a collection which is **ordered** and **unchangeable**.

It **allow** the **duplicate values**.

Ex.

`name = ('raj', 'vijay', 'rajash', 'dinesh')`

we can't add any values, and we can't change inside the tuple.

In tuple will use **index values**.

Ex.

`Tuple = ('apple', 'orange', 'kiwi', 'melon', 'mango')`

`print (Tuple[:3])`

here, we have 5 values. `3` given the value means we will get only the first three values.

`print (Tuple[2:])`

number after colon means we get the output after ~~2~~ 2 values.

Output.

↳ `['kiwi', 'melon', 'mango']`

July 2017							August 2017							September 2017						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
30	31				1			1	2	3	4	5							1	2
2	3	4	5	6	7	8	6	7	8	9	10	11	12	3	4	5	6	7	8	9
9	10	11	12	13	14	15	13	14	15	16	17	18	19	10	11	12	13	14	15	16
16	17	18	19	20	21	22	20	21	22	23	24	25	26	17	18	19	20	21	22	23
23	24	25	26	27	28	29	27	28	29	30	31			24	25	26	27	28	29	30

C: > Users > abinaya > Desktop > vs code > day 02 problems.py > ...

```
1  #using the swap in list
2  def swaplist(list):
3      list[0],list[-1] = list[-1],list[0]
4      return list
5  list=[2,34,43,22,54,65]
6  print(swaplist(list))
7
8  def swaplist1(list1):
9      get=list1[-1],list1[0]
10     list[0],list1[-1]=get
11     return list1
12 list1=[2,34,63,86,54]
13 print(swaplist1(list1))
14
15 #useage of opprarnd
16 list=[1,3,4,6]
17 a,*b,c=list
18 print(a,b,c)
```

```
"""
Swap
"""
"""
Swap
"""
"""
Swap
"""
"""
Swap
"""
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Code ▾ 📄 📌 ^ ✕

[Running] python -u "c:\Users\abinaya\Desktop\vs code\tempCodeRunnerFile.py"

1 [3, 4] 6

[Done] exited with code=0 in 0.287 seconds