

# # Python Advance Data Types and Data Structures

- ① Lists in python
- ② Tuples in python

Zomato → 1000 users

<u>variable</u>	<u>list</u>
user_1 = 7.5	{ 7.5, 8.5, 9.5, ..., 1000 }
user_2 = 8.5	
user_3 = 9.5	
⋮	
user_10 = 10	

## # Array vs Lists

### # Array

- Fixed size
- Homogeneous
- Speed on execution fast
- Less memory

int a[10] = { 1, 2, 3, ..., 10 }

str b[20] = { "Bunny", "un" }

# # Lists

- Dynamic size
- Heterogeneous
- Speed of execution → Slow
- more memory

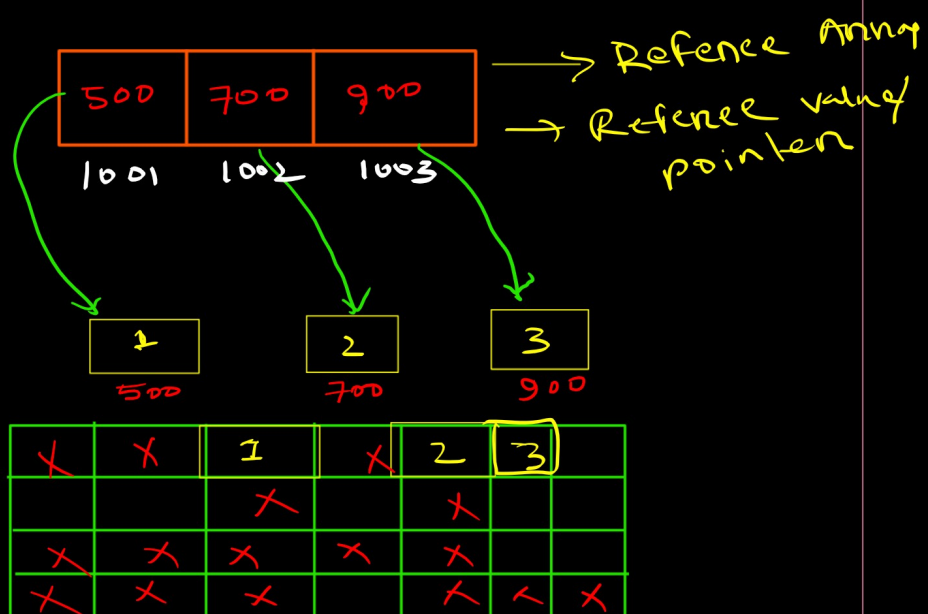
## Array

int a[4] = {<sup>0 1 2 3</sup> 1, 2, 3, 4}

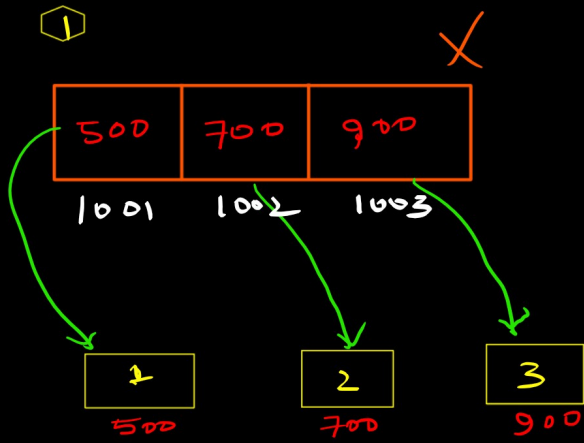
1	2	3	4
Binary	Binary	Binary	Binary
1001	1004	1006	1008

## Lists

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



①



X	X	1	X	2	3	4
		X		X		5
X	X	X	X	X		
X	X	X		X	X	X

✓ ②

500	700	900	1100	X	X
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500	700	900	1100	1300	X	X	X	X	X	X
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