Python

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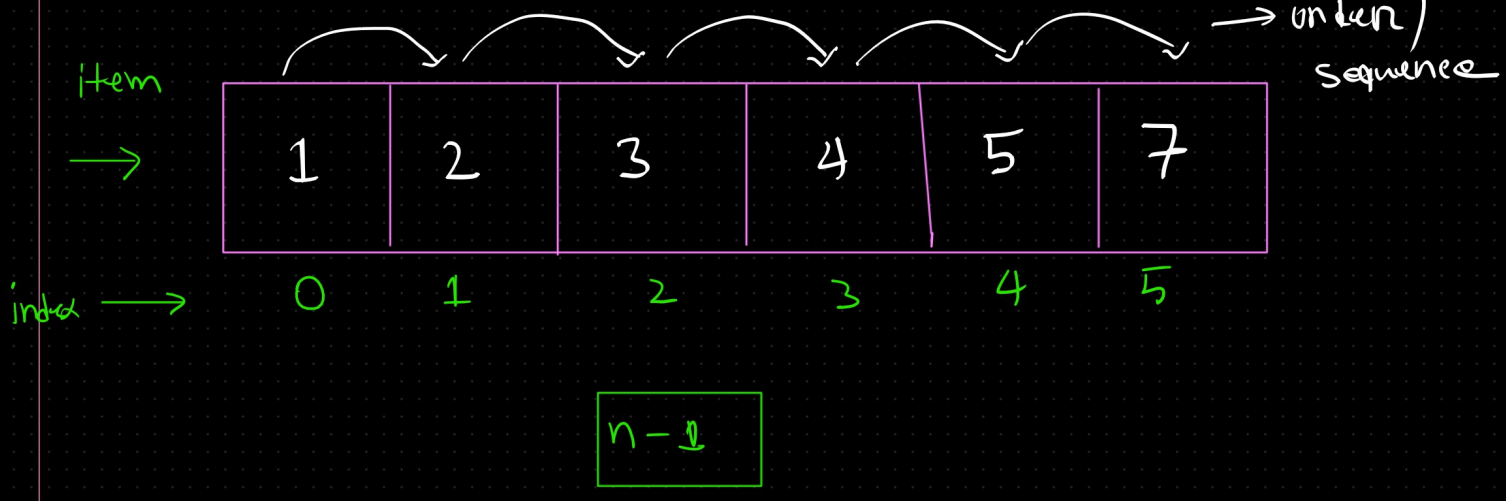
Lists / Array

* Lists are ordered collection of data items.
* They store multiple items in a single variable
* List items are separated by commas and enclosed within square brackets → [ ]
* List are changeable / mutable – meaning we can alter them after creation.

Example:

```
lst1 = [1, 2, 3, 4, 5, 7]
lst2 = ["Bappy", "Alex", "Sunny", "krish"]
lst3 = ["Bappy", 1, 0.3, True]
```



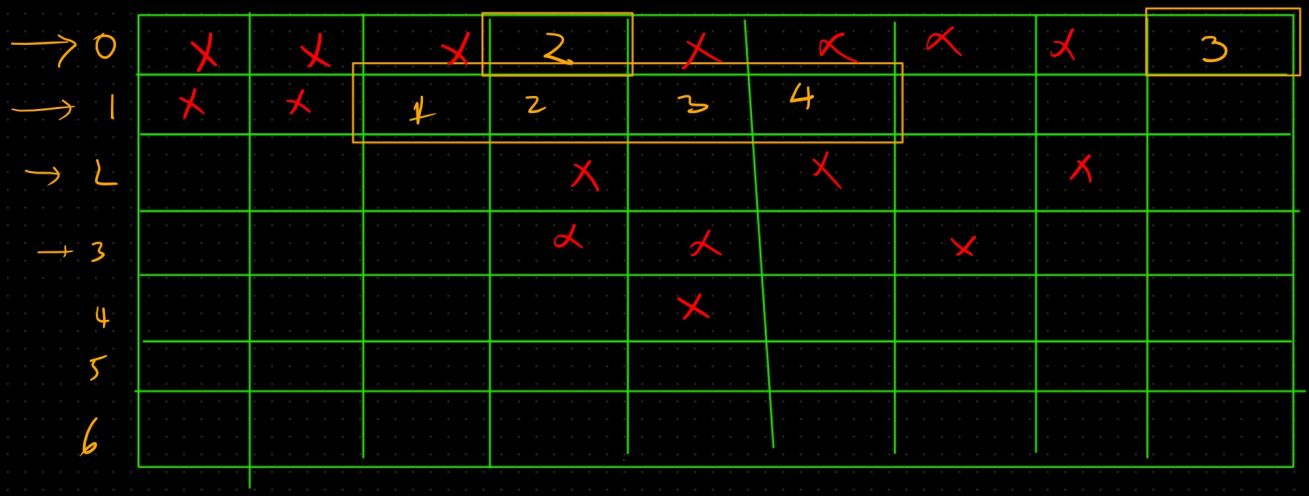
Variable:

$a = 3$ $\longrightarrow$ 0 $\boxed{3}$ memory loc

$b = 4$ 10 $\boxed{4}$ memory loc

RAM

→ 0	x	x	x	2	x	x	x	x	3
→ 1	x	x	1	2	3	4			
→ 2				x		x		x	
→ 3				x	x		x		
4					x				
5									
6									



$b = 3$
$a = 2$

lst = [1, 2, 3, 4]
0 1 2 3

Why list Data Structure Important?

Stocool →

class-1 = ["Bappy", "Alex", "Krish", "Suny"]

class-2 ⇒ ["price", "sandeep" - - -]

class-3 ⇒ [" — — — —]

print(class2) →

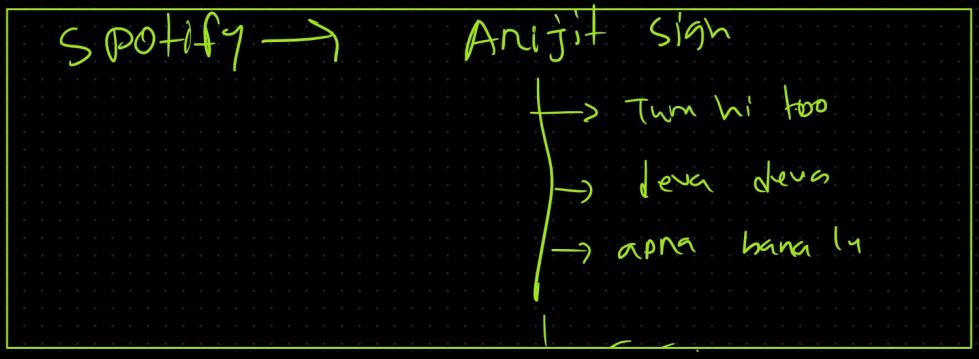
class-1_1 ⇒ "Bappy"

class-1_2 ⇒ "Alex"

class-1_3 ⇒ "kris"

print (calss-1)

print (class-1)



programmer → Arijit ⇒ ["Tum hi ho", "deva deva", apna bana lo"]

list ⇒ ["Bappy", "Bappy"]

0 1

colon ⇒ ["Yellow", "Green", "Red"]

if "Red" in colon:

print ("yes")

Indexing → [start : end : step]

List comprehension

Next → List method

- append()
- clear()
- copy()
- count()
- extend()
- Index()
- insert()
- pop()
- remove()
- Reverse()
- sort()