Python Programming

List of lists - Indexing

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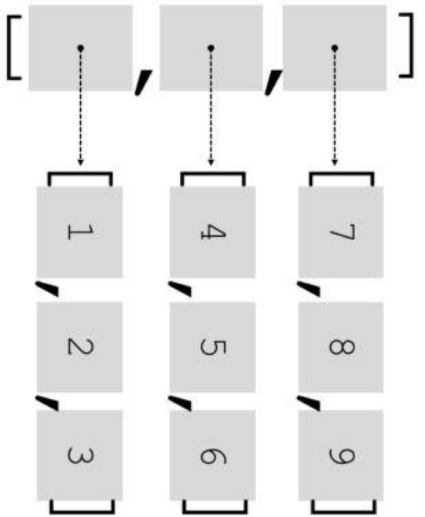
List of lists

- In this section, we won’t learn new Python Syntax
- We will stress how nesting lists can create strong representation!
- A list of list of integer can create what we call a matrix
  - In C++ and Java it is called array. It has a fixed view
  - In python, we also have the numpy arrays
  - But we will focus here on using list of list to emulate a 2D array

Nesting lists

```
3   lst0 = [1, 2, 3]
4   lst1 = [4, 5, 6]
5   lst2 = [7, 8, 9]
6
7   print(lst2[1])  # 8
8
9   list_of_lists = [lst0, lst1, lst2]
10
11  print(list_of_lists)
12  # [[1, 2, 3], [4, 5, 6], [7, 8, 9]]
13
14  print(list_of_lists[2]) # [7, 8, 9]
15  print(list_of_lists[2][1]) # 8
```



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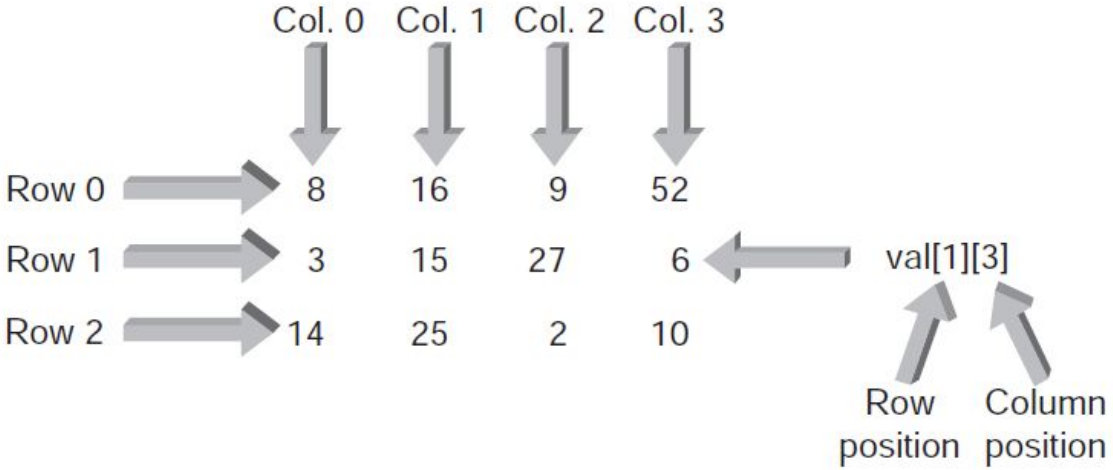
Indexing (think 2D array)




```
3   lst = [
4       [8, 16, 9, 52],
5       [3, 15, 27, 6],
6       [14, 25, 2, 10]
7   ]
```

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"Acquire knowledge and impart it to the people."

"Seek knowledge from the Cradle to the Grave."