

## Agenda

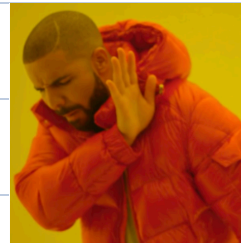
1. List Introduction
2. Indexing lists
3. List methods
4. Membership Operator
5. Iterating over lists
6. Taking list as input

WHY DOES PYTHON LIVE ON LAND??

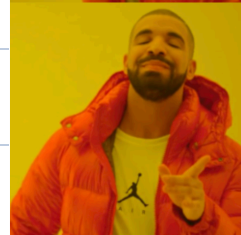


BECAUSE IT IS ABOVE C LEVEL!!

Q → Store all runs made by Virat Kohli in multiple matches.



Create multiple variables



Create a list ✓

## Lists

- List is an **ordered** collection of data.
- It is a data structure that can store **multiple** values.
- List have no limit on how many values it can store.
- Creating a list -> `[]` squared brackets
- They store **comma separated** values.

index

0 1 2 3 4 5  
runs = [67, 50, 23, 81, 54, 23]  
-6 -5 -4 -3 -2 -1  
-len →

runs[1] = 50

0 — (len(runs) - 1)

runs[-1] = 23

runs[i] & runs[-i] ✓

## List Methods

- 1) `len()` → Returns the length of the list.
- 2) `append()` → Add an element at the end of list.
- 3) `extend()` → Add a list at the end of list.
- 4) `insert()` → Add element at a particular index.
- 5) `pop()` → Remove element at particular index or last element if no index is passed.
- 6) `remove()` → Remove first occurrence of a value.
- 7) `index()` → Return index of first occurrence of value.
- 8) `count()` → Return the count of times a value is present.

## Membership Operator

### How can I check if an element exists in a list?

- The `in` and `not in` are called **membership operators**, used to check whether a value exists in a sequence (such as a list, tuple, string, or set) or not.
- `in` operator: This operator checks if a specified value exists in a list.
  - It returns True if the value is found in the list, and False otherwise.
- `not in` operator: This operator checks if a specified value does not exist in a list.
  - It returns True if the value is not found in the list, and False otherwise.

Iterating over list