- **Definition**: A list in Python is a dynamic array that can hold elements of different or similar data types.
- **Declaration**: Lists are declared using square brackets `[]` with items separated by commas:
  - `list1 = [1, 2, 3, 4, 5]`
  - `list2 = ['A', 'B', 'C']`
  - `list3 = ['string', 123, True, 3.14]`
- **Indexing**: Lists are zero-indexed. Access elements using `list[index]` (e.g., `list1[2]` returns `3`).
- **Nested Lists**: Lists can contain other lists as elements.
  - Example: `list4 = [1, [2, 3, 4], 5, 6]`
- **Adding Items**:
  - `insert(index, value)` : Inserts a value at the specified index.
  - `append(value)` : Adds a value at the end of the list.
  - `extend([values])` : Adds multiple values to the list.
- **Removing Items**:
  - `pop(index)` : Removes the item at the specified index.
  - `del list[index]` : Deletes the item at the specified index.
- **Iterating**: Use a `for` loop to iterate through list elements.
  - Example: `for x in list1: print(x)`
- **Printing Lists**: Use `print(list)` to display the entire list.
- **Dynamic Operations**: Lists support multiple built-in functions to modify, access, and iterate over data dynamically.