

Adding Elements to a List

Elements can be added to a list in different ways, following are the methods to add elements to a list.

1. `append()`
2. `insert()`
3. `extend()`



append() Method

- A built-in method used to **add** an **item** at the **end** of a list.
- **Syntax:** `list.append(value)`

```
C:\Users\jaspr> python
>>> languages = ['c', 'cpp', 'java']
>>> languages
['c', 'cpp', 'java']
>>> languages.append('python')
>>> languages
['c', 'cpp', 'java', 'python']
>>>
```



append() Method

- Duplicate append() method to add **multiple items**.

A screenshot of a Windows command prompt window with a white title bar and standard minimize, maximize, and close buttons. The terminal shows a Python session where a list named 'languages' is created with four elements: 'c', 'cpp', 'java', and 'python'. Then, three more elements are added to the list using the 'append()' method: 'ruby', 'javascript', and 'php'. Finally, the list is printed out, showing all seven elements in order.

```
C:\Users\jaspr> python
>>> languages = ['c', 'cpp', 'java', 'python']
>>> languages.append('ruby')
>>> languages.append('javascript')
>>> languages.append('php')
>>> languages
['c', 'cpp', 'java', 'python', 'ruby', 'javascript', 'php']
>>>
```



append() Method

- A list as an item can be added.


Using append() method, we can not add more than one item to to specified list. — □ X

```
C:\Users\jaspr> python
>>> languages = ['c', 'cpp', 'java']
>>> languages.append(['python', 'javascript'])
>>> languages
['c', 'cpp', 'java', ['python', 'javascript']]
>>>
```



insert() Method

- A built-in method used to **add** an **item** at a **specific position**.
- **Syntax:** `list.insert(position, value)`

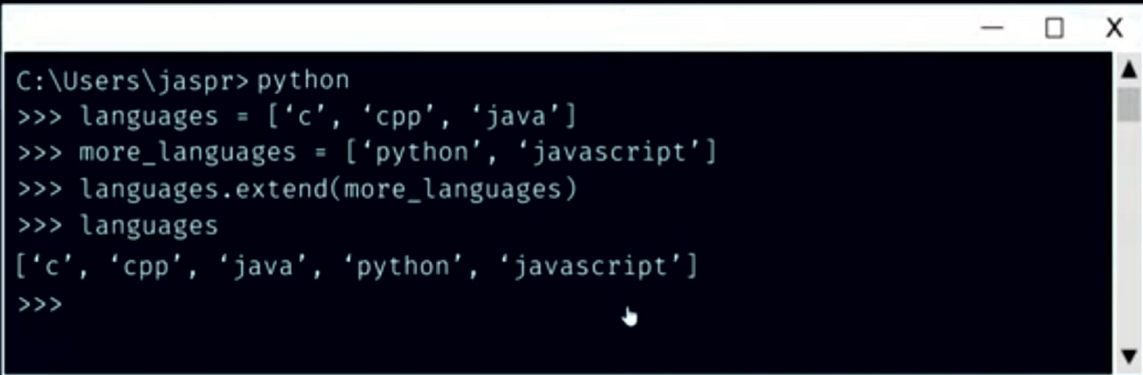
A screenshot of a Windows command prompt window with a white title bar and standard minimize, maximize, and close buttons. The window contains a Python interpreter session. The user enters 'python' at the prompt 'C:\Users\jaspr>'. The interpreter shows '>>>' prompts. The user enters 'languages = ['c', 'cpp', 'java']'. The user enters 'languages.insert(0, 'python')'. The user enters 'languages'. The interpreter outputs '['python', 'c', 'cpp', 'java']'. The user enters '>>>' again. A mouse cursor is visible over the second '>>>' prompt.

```
C:\Users\jaspr> python
>>> languages = ['c', 'cpp', 'java']
>>> languages.insert(0, 'python')
>>> languages
['python', 'c', 'cpp', 'java']
>>>
```



extend() Method

- A built-in method used to **add all items** of **one list** in **another list**.
- *Syntax:* `list1.extend(list2)`

A screenshot of a Windows command prompt window with a white title bar and standard minimize, maximize, and close buttons. The terminal text is as follows:

```
C:\Users\jaspr> python
>>> languages = ['c', 'cpp', 'java']
>>> more_languages = ['python', 'javascript']
>>> languages.extend(more_languages)
>>> languages
['c', 'cpp', 'java', 'python', 'javascript']
>>>
```

A mouse cursor is visible over the last prompt line.