Here's a clear breakdown of Python's file opening modes — both basic and extended — to help you choose the right one for your task:

**Basic File Modes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mode** | **Description** | **File Must Exist?** | **Cursor Position** | **Overwrites?** |
| 'r' | Read-only mode | Yes | Start of file | No |
| 'w' | Write-only mode | No (creates new) | Start of file | Yes (truncates) |
| 'a' | Append-only mode | No (creates new) | End of file | No |

**Extended File Modes (Read + Write)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mode** | **Description** | **File Must Exist?** | **Cursor Position** | **Overwrites?** |
| 'r+' | Read and write | Yes | Start of file | No |
| 'w+' | Write and read | No (creates new) | Start of file | Yes (truncates) |
| 'a+' | Append and read | No (creates new) | End of file | No |

**Quick Tips**

* Use 'r' or 'r+' when you want to **preserve existing content**.
* Use 'w' or 'w+' when you want to **start fresh**.
* Use 'a' or 'a+' when you want to **add to the end** without deleting anything.