**File Handling in Python**

**Definition:**

File handling in Python is used to store, read, write, and update data stored permanently in files.

**File Operations:**

1. Create
2. Open
3. Read
4. Write / Append
5. Close

**Syntax:**

f = open("filename", "mode")

| **Mode** | **Meaning** | **Description** |
| --- | --- | --- |
| 'r' | Read | Opens file for reading |
| 'w' | Write | Creates or overwrites file |
| 'a' | Append | Adds data to end of file |
| 'x' | Create | Creates new file |
| 'b' | Binary | Opens file in binary mode |
| 't' | Text | Default text mode |

**Reading Files:**

f = open("data.txt", "r")

print(f.read()) # Read all

f.close()

**Writing Files:**

f = open("data.txt", "w")

f.write("Hello Python")

f.close()

**Appending Data:**

f = open("data.txt", "a")

f.write("\nNew line")

f.close()

**Using with (auto close):**

with open("data.txt", "r") as f:

print(f.read())

**Common Methods**

| **Method** | **Function** |
| --- | --- |
| read() | Reads file content |
| readline() | Reads one line |
| readlines() | Reads all lines |
| write() | Writes a string |
| writelines() | Writes list of strings |
| seek() | Moves cursor |
| tell() | Shows cursor position |

**Example:**

with open("example.txt", "w") as f:

f.write("Python File Handling Example")

with open("example.txt", "r") as f:

print(f.read())