

File Handling

What is File Handling?

- File handling means working with files (create, read, write, update).
- Python provides built-in functions for file handling.
- Files are opened using the `open()` function.

Syntax:

```
open("filename", "mode")
```

File Modes:

- "r" → Read (default)
- "w" → Write (overwrites file)
- "a" → Append (adds new data without removing old)
- "x" → Create new file (error if exists)
- "t" → Text mode (default)
- "b" → Binary mode

Opening and Reading a File

```
f = open("demo.txt", "r")  
print(f.read())  
f.close()
```

Writing to a File

```
f = open("demo.txt", "w")  
f.write("Hello Python World!")  
f.close()
```

Appending to a File

```
f = open("demo.txt", "a")  
f.write("\nThis is new line.")  
f.close()
```

Reading Line by Line

```
f = open("demo.txt", "r")  
for line in f:  
    print(line)  
f.close()
```

Importance of File Handling:

- Allows **data storage** permanently.
- Used in **databases, logs, configuration files**.
- Makes programs useful in real-world scenarios.