🔍 Why is logging used in Python? (Simple Explanation)

Logging is used to **record** what your program is doing — especially **important events**, **errors**, and **debug info** — **while it's running**.

🧠 Think of it like:

📔 Keeping a **diary or notebook** of what your program is doing step by step.

✅ Benefits of Logging:

Feature	Why it helps
📋 **Tracks behavior**	Shows what happened and when.
🐞 **Helps debugging**	Easier to find out where and why things went wrong.
📁 **Saves to file**	You can review it later, even after the program ends.
📊 **Monitors systems**	Great for big apps or servers — keeps a log of errors/performance.

🔧 Example:

```
import logging

logging.basicConfig(level=logging.INFO)

logging.info("Program started")
```

📄 Output:

```
INFO:root:Program started
```

📦 Real-World Use:

- When a **website crashes**, logs help find out why.
- In banking apps, logs track **suspicious transactions**.
- For AI models, logs show **training progress** and **issues**.

If you're new: think of print() for users, but logging for **developers** and **future debugging**.