Escape Sequences:

- Escape sequences are special symbols in Python used inside strings to represent things like newline, tab, quotes, etc.

- They always start with a backslash (\).

Common Escape Sequences:

\n : Newline → "Hello\nWorld" → Hello (newline) World

\t : Tab (space) → "Hello\tWorld" → Hello   World

\\ : Backslash → "C:\\Users\\Ali" → C:\Users\Ali

\" : Double Quote → "He said \"Hi\"" → He said "Hi"

\' : Single Quote → 'It\'s Python' → It's Python

Why Use Escape Sequences?

- To format output properly (new lines, spaces).

- To include quotes inside strings without error.

- To represent file paths (C:\Users\Name).

Importance of Escape Sequences:

- Without escape sequences, output formatting becomes messy.

- Helps in creating clean, user-friendly output.

Comments:

- Comments are non-executable lines in code (Python ignores them).

- Used to explain code and make it readable.

Types of Comments in Python:

1. **Single-line Comment** → starts with #

   Example: # This is a single-line comment

2. **Multi-line Comment** → use triple quotes ''' ''' or """ """

Importance of Comments:

- Makes code easy to understand for others.

- Helps you remember logic when you read code later.

- Used by professional developers in big projects.