

What is Pattern Printing?

- Using **loops** to print different shapes (stars, numbers, alphabets).
- Improves **logic building** and understanding of **nested loops**.
- Common in programming interviews & coding practice.

Important Concepts Before Patterns

- **Outer loop** → controls rows.
- **Inner loop** → controls columns (what to print in each row).
- `print("*", end=" ")` → to print stars in same line.
- `print()` → to move to next line after finishing a row.

Examples of Patterns:

(a) Right Angle Triangle (Stars)

```
for i in range(1, 6):  
    for j in range(1, i+1):  
        print("*", end=" ")  
    print()
```

(b) Square Pattern

(c) Number Pattern

(d) Reverse Triangle

Key Points to Remember:

- Outer loop = rows.
- Inner loop = columns.
- `end=" "` is used to stay in same line.
- Always use `print()` at the end of inner loop to move to next line.