

Python Nested For Loop Pattern Questions

Instructions: Solve the following pattern problems using only nested for loops in Python. Do not use built-in pattern libraries. Focus on logic building.

Level 1: Basic Patterns (10 Questions)

- 1 Print a right-angled triangle using '*' for n rows.
- 2 Print a square pattern of '*' of size n x n.
- 3 Print numbers from 1 to n in each row (same sequence repeated).
- 4 Print increasing number triangle (1, 12, 123, ...).
- 5 Print decreasing star pattern.
- 6 Print a right-angled triangle with constant row numbers.
- 7 Print alphabet triangle (A, AB, ABC...).
- 8 Print a pattern where each row prints even numbers only.
- 9 Print a rectangle pattern with numbers instead of stars.
- 10 Print inverted right-angled triangle of stars.

Level 2: Intermediate Patterns (10 Questions)

- 1 Print a pyramid star pattern centered properly.
- 2 Print a hollow square pattern of size n.
- 3 Print Floyd's triangle.
- 4 Print Pascal-like incremental number pattern (without formula).
- 5 Print mirrored right-angled triangle.
- 6 Print a pattern with alternating 0 and 1 in triangle form.
- 7 Print number palindrome triangle.
- 8 Print a diamond pattern using stars.
- 9 Print a pattern where rows alternate between stars and numbers.
- 10 Print a hollow right-angled triangle.

Level 3: Advanced Patterns (10 Questions)

- 1 Print a butterfly pattern using stars.
- 2 Print a sandglass pattern.
- 3 Print a hollow diamond pattern.
- 4 Print a numeric hourglass pattern.
- 5 Print a pattern forming an X shape using stars.
- 6 Print a pattern forming a plus (+) shape using stars.
- 7 Print concentric number square pattern.

- 8 Print zig-zag star pattern.
- 9 Print hollow pyramid pattern.
- 10 Print Pascal's triangle using nested loops only.