**Pattern-Based Programming Questions (All 35 Questions - Interview Style)**

### 🔷 Square, Rectangle, and Triangle Patterns (1–15)

1. **Solid Square Pattern**  
   **Problem:** Print a solid square of stars of size n.  
   **Input:** n = 4  
   **Output:**

\* \* \* \*  
\* \* \* \*  
\* \* \* \*  
\* \* \* \*

1. **Solid Rectangle Pattern**  
   **Problem:** Print a solid rectangle of m rows and n columns.  
   **Input:** m = 3, n = 5  
   **Output:**

\* \* \* \* \*  
\* \* \* \* \*  
\* \* \* \* \*

1. **Right-Angled Triangle (Left-Aligned)**  
   **Problem:** Print a left-aligned right-angled triangle.  
   **Input:** n = 5  
   **Output:**

\*  
\* \*  
\* \* \*  
\* \* \* \*  
\* \* \* \* \*

1. **Right-Angled Triangle (Right-Aligned)**  
   **Input:** n = 5  
   **Output:**

\*  
 \* \*  
 \* \* \*  
 \* \* \* \*  
\* \* \* \* \*

1. **Inverted Triangle (Left-Aligned)**  
   **Input:** n = 5  
   **Output:**

\* \* \* \* \*  
\* \* \* \*  
\* \* \*  
\* \*  
\*

1. **Inverted Triangle (Right-Aligned)**  
   **Input:** n = 5  
   **Output:**

\* \* \* \* \*  
 \* \* \* \*  
 \* \* \*  
 \* \*  
 \*

1. **Centered Pyramid Pattern**  
   **Input:** n = 4  
   **Output:**

\*  
 \* \* \*  
 \* \* \* \* \*  
\* \* \* \* \* \* \*

1. **Diamond Pattern**  
   **Input:** n = 3  
   **Output:**

\*  
 \* \* \*  
\* \* \* \* \*  
 \* \* \*  
 \*

1. **Butterfly Pattern**  
   **Input:** n = 4  
   **Output:**

\* \*  
\* \* \* \*  
\* \* \* \* \*  
\* \* \* \*  
\* \*

1. **Left-Aligned Half Diamond**  
   **Input:** n = 4  
   **Output:**

\*  
\* \*  
\* \* \*  
\* \* \* \*  
\* \* \*  
\* \*  
\*

1. **Right-Aligned Half Diamond**  
   **Input:** n = 4  
   **Output:**

\*  
 \* \*  
 \* \* \*  
\* \* \* \*  
 \* \* \*  
 \* \*  
 \*

1. **Sandglass Pattern**  
   **Input:** n = 4  
   **Output:**

\* \* \* \*  
 \* \* \*  
 \* \*  
 \*  
 \* \*  
 \* \* \*  
\* \* \* \*

1. **Increasing Width Triangle**  
   **Input:** n = 5  
   **Output:**

\*  
\* \*  
\* \* \*  
\* \* \* \*  
\* \* \* \* \*

1. **Decreasing Width Triangle**  
   **Input:** n = 5  
   **Output:**

\* \* \* \* \*  
\* \* \* \*  
\* \* \*  
\* \*  
\*

1. **Right-Aligned Hill Pattern**  
   **Input:** n = 4  
   **Output:**

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 \* \*  
 \* \* \*  
\* \* \* \*

### 🔲 Hollow Patterns (16–25)

1. **Hollow Square Pattern**  
   **Problem:** Print a hollow square of stars of size n.  
   **Input:** n = 4  
   **Output:**

\* \* \* \*  
\* \*  
\* \*  
\* \* \* \*

1. **Hollow Rectangle Pattern**  
   **Problem:** Print a hollow rectangle of m rows and n columns.  
   **Input:** m = 4, n = 5  
   **Output:**

\* \* \* \* \*  
\* \*  
\* \*  
\* \* \* \* \*

1. **Hollow Right-Angled Triangle (Left-Aligned)**  
   **Input:** n = 5  
   **Output:**

\*  
\* \*  
\* \*  
\* \*  
\* \* \* \* \*

1. **Hollow Right-Angled Triangle (Right-Aligned)**  
   **Input:** n = 5  
   **Output:**

\*  
 \* \*  
 \* \*  
 \* \*  
\* \* \* \* \*

1. **Hollow Inverted Triangle (Left-Aligned)**  
   **Input:** n = 5  
   **Output:**

\* \* \* \* \*  
\* \*  
\* \*  
\* \*  
\*

1. **Hollow Inverted Triangle (Right-Aligned)**  
   **Input:** n = 5  
   **Output:**

\* \* \* \* \*  
 \* \*  
 \* \*  
 \* \*  
 \*

1. **Hollow Pyramid Pattern**  
   **Input:** n = 4  
   **Output:**

\*  
 \* \*  
 \* \*  
\* \* \* \* \* \* \*

1. **Hollow Diamond Pattern**  
   **Input:** n = 3  
   **Output:**

\*  
 \* \*  
\* \*  
 \* \*  
 \*

1. **Hollow Butterfly Pattern**  
   **Input:** n = 4  
   **Output:**

\* \*  
\* \* \* \*  
\* \* \*  
\* \*  
\* \* \*  
\* \* \* \*  
\* \*

1. **Hollow Hourglass Pattern**  
   **Input:** n = 5  
   **Output:**

\* \* \* \* \*  
\* \*  
 \* \*  
 \*  
 \* \*  
\* \*  
\* \* \* \* \*

### 🔢 Number-Based Patterns (26–35)

1. **Increasing Number Triangle**  
   **Problem:** Print numbers from 1 to n in triangle form.  
   **Input:** n = 5  
   **Output:**

1  
1 2  
1 2 3  
1 2 3 4  
1 2 3 4 5

1. **Repeating Row Number Triangle**  
   **Input:** n = 5  
   **Output:**

1  
2 2  
3 3 3  
4 4 4 4  
5 5 5 5 5

1. **Continuous Number Triangle**  
   **Input:** n = 4  
   **Output:**

1  
2 3  
4 5 6  
7 8 9 10

1. **Reverse Row Number Triangle**  
   **Input:** n = 5  
   **Output:**

1  
2 1  
3 2 1  
4 3 2 1  
5 4 3 2 1

1. **Inverted Number Triangle**  
   **Input:** n = 5  
   **Output:**

5 4 3 2 1  
4 3 2 1  
3 2 1  
2 1  
1

1. **Right-Aligned Number Triangle**  
   **Input:** n = 5  
   **Output:**

1  
 1 2  
 1 2 3  
 1 2 3 4  
1 2 3 4 5

1. **Pyramid Number Pattern**  
   **Input:** n = 4  
   **Output:**

1  
 1 2 1  
 1 2 3 2 1  
1 2 3 4 3 2 1

1. **Even Number Triangle**  
   **Input:** n = 5  
   **Output:**

2  
2 4  
2 4 6  
2 4 6 8  
2 4 6 8 10

1. **Odd Number Triangle**  
   **Input:** n = 5  
   **Output:**

1  
1 3  
1 3 5  
1 3 5 7  
1 3 5 7 9

1. **Pascal’s Triangle**  
   **Input:** n = 5  
   **Output:**

1  
1 1  
1 2 1  
1 3 3 1  
1 4 6 4 1

✅ All 35 pattern questions are now fully formatted in an **interview-style layout** with problem statements, inputs, and expected outputs.

Would you like to:

* 🐍 Add Python code for each?
* 📥 Export as a PDF?