**SHEET-2**

**Pattern Based Questions**

Q.1 [Write a Program to print a butterfly shape Number pattern.](https://www.csinfo360.com/2020/08/program-to-print-butterfly-shape-number-pattern.html)

**1     7**

**12   67**

**123 567**

**1234567**

**123 567**

**12   67**

**1     7**

Q.2 [Write a Program to print the Fibonacci Half Pyramid Pattern](https://www.csinfo360.com/2020/08/program-to-print-fibonacci-half-pyramid.html).

**1**

**1 2**

**3 5 8**

**13 21 34 55**

**89 144 233 377 610**

Q.3 [Pascal’s triangle](http://en.wikipedia.org/wiki/Pascal's_triangle) is a triangular array of the binomial coefficients. Write a function that takes an integer value n as input and prints first n lines of the Pascal’s triangle. Following are the first 6 rows of Pascal’s Triangle.

**1**

**1 1**

**1 2 1**

**1 3 3 1**

**1 4 6 4 1**

**1 5 10 10 5 1**

Q.4 Given the value of n, print the arrow pattern.

**Input**: n = 5

**Output**:

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# Q.5 Program to print diagonal star patterns.

# For the given input, this program prints the following pattern. The input must be an odd number.

**Input**: 7

**Output**:

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