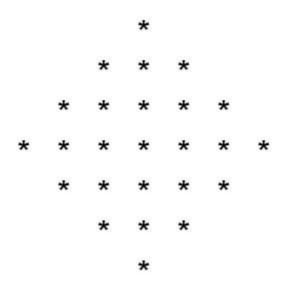
## Lab Task 8

**Topic**: Nested Loops

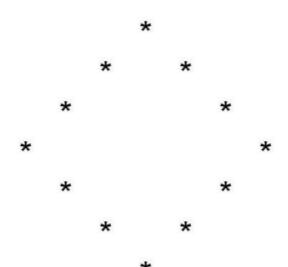
## Task # 1

Write C++ programs to draw the following patterns:

1. For N = 4



2. For N = 4



3. For N = 4

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Note: All the codes Must be Generic, i.e should work for any given input.

## Task # 2

Write a C++ program to calculate the value of **sin** upto N terms using the following series.

$$\sin(x) = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \dots = \sum_{n=0}^{\infty} \frac{(-1)^n x^{2n+1}}{(2n+1)!}$$

## **Task # 3**

Write a C++ program to reverse any given number.

Note: Program Must be generic,