Name: _____ **ID:** _____

Due: today or in a lab session next week

Instructions:

- Marking lab assignments will be done in the lab
- **Compile** and **Run** your program
- **Show** and **Explain** the output and your code to the lecturer or the lab assistance.

-------------------------------------- **Lab Assignments** -------------------------------------

Lab 1: Write a program in C to display following pattern.

Example output:
| ```
Enter a number of row: 5
54321
4321
321
21
1
``` |

Lab 2: Write a program using a nested loop to print a triangle shape of `N` where `N` is a number of the last row represented by asterisk (*). Example of the output is shown as below (`N=7`).

Example output:
| ```
Input n: 7
   *
  ***
 *****
*******
``` |

Lab 3: Write a program using a nested loop to print a down-pointing triangle shape of `N` where `N` is a number of the first row represented by asterisk (*). Example of the output is shown as below (`N=7`).

Example output:
| ```
Input n: 7
*******
 *****
  ***
   *
``` |

Bonus Lab 1: Write a program using a nested loop to print a diamond shape of N where N is a number of the middle row represented by asterisk (*). Example of the output is shown as below (N=7).

Example output:

```
Input n: 7
    *
   ***
  *****
 *******
  *****
   ***
    *
```