<u>Practice Lab Assignment 6</u>

For this Practice Lab Assignment, you will write programs in C, **making use of the concepts that have been taught in the class.**

Do not use arrays and any other concept that has not been yet taught in the class.

Instructions

- There are 10 questions in this assignment.
- Any discussion with neighbor/or any other student is strictly not allowed.
- Mobile phones are not allowed. If found, disciplinary action may be taken.

Due Date: This is only a Practice Lab so no submission is required.

Grading Criteria

No Grading Criteria.

<u>Programming Questions</u>

1. Write a program to print the following pattern on the output screen.
   1
   2 1
   3 2 1
   4 3 2 1
   5 4 3 2 1

2. Write a program using "Nested for" loop to print the following pattern on the output screen.
   1
   0 1
   1 0 1
   0 1 0 1

3. Write a program to print the following pattern on the output screen.
   1
   1 0
   1 0 1
   1 0 1 0
   1 0 1 0 1

4. Write a C program to find a peculiar two digit number which is three times the sum of its digits.

5. Write a program to print the following pattern on the output screen.

```
        *
       ***
      *****
     *******
    *********
```

6. Write a program to print the following pattern on the output screen.

```
        *
       *A*
      *A*A*
     *A*A*A*
```

7. Write a sentinel controlled menu-driven program for the following options for the user:
   (a) To find LCM of 2 Numbers
   (b) To find HCF of 2 Numbers
   (c) To check whether a number is perfect square or not.
   (d) Exit

8. Write a program to print the following pattern

```
*
* *
* * *
* * * *
* * * * *
* * * *
* * *
* *
*
```

9. Write a program to print the following pattern
   ```
   1
   2 1 2
   3 2 1 2 3
   4 3 2 1 2 3 4
   5 4 3 2 1 2 3 4 5
   ```

10. Write a program that displays all the numbers from 1-100 that are not divisible by 2 as well as by 3.