

## Lab Activities 04

- 1) Write a program that reads the score of a student in a subject and displays his grade according to the following criteria:

Score	Grade
$\geq 90$	A+
80 – 89	A
70 – 79	B
60 – 69	C
50 – 59	D
$< 50$	F

- 2) Write a program that gets the system time and display it on the console with proper format **(13:51:15)**.
- 3) Write and run a program that simulates a simple calculator. It reads two integers and a character. If the character is +, the sum is printed; if it is -, the difference is printed; if it is \*, the product is printed; and if it is /, the quotient is to be printed.
- 4) Input a number (0~8) and print its factorial. If user enters any number other than (0~8), prompt for Re-enter. Maximum tries are 03.
- 5) Write a program that reads 5 integers and output that how many times repetition occur.
- 6) Take a number from user and print its table.
- 7) Print out the empty diamonds of stars. Height will be given as input.

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

```

- 8) Display an X of stars. Height will be given as input.

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

```

- 9) Analyze the following input and output, and then write algorithm of a program that prints such a pattern given the input.

<b>Input: 5</b> <b>Output:</b> 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5	<b>Input: 3</b> <b>Output:</b> 1 1 1 2 2 2 3 3 3
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- 10) Write program that takes an integer value  $N$  and to display a table of integers from 1 to  $N$  and their squares.

```
Enter the Number:5
Number
1
2
3
4
5

Square
1
4
9
16
25
Strike a key when ready . . . _
```