

**Dept. of CSE, Bennett University**  
**ECSE379L – Programming Using C++**

Lab Assignment – 2

In this lab, you will write a C++ program to solve the following problems.

1. An integer N is given. Write a program to find the square and cube of the integer N. (Range of N lies between -100 and +100, both the numbers are included)

Example:      Input (1): 5, Output (1): 25, 125  
                  Input (2): -5, Output (2): 25, -125  
                  Input (3): 1, Output (3): 1, 1

2. The BASIC Salary of an employee is provided. Write a program to find the Gross Salary (BASIC + DA% of BASIC + HRA% of BASIC) of the employee.

Example:      Input (1): BASIC = 20000, DA = 17%, HRA = 20%  
                  Output (1): Gross Salary = 27400

3. Write a program to find the factorial of a number. It should display an error message if the number is negative.

Example:      Input (1): 6, Output (1): 720  
                  Input (2): - 3, Output (2): Error  
                  Input (3): 1, Output (3): 1

4. Write a program to display the count of prime numbers upto a particular number (N). Here N is included.

Example:      Input (1): 100, Output: 25  
                  Input (2): 23, Output: 9

**Submission Instructions:**

- Submit your assignment files from LMS **within 4 days** from the day of your lab slot. Save all the files as per the format RollNo\_Lab#\_QuestionNo.cpp (Example: E18CSE362\_Lab2\_Q2.cpp). **Make a single .zip file and upload at a time.**
- Write your Name and Roll No as comment line in the program. Without this you will score zero for that particular question.
- Provide label/comments in the appropriate place.
- Late submission will lead to penalty.
- Any form of plagiarism/copying from peer or internet sources will lead penalty.