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Department of Computer Science
CS 1011 –Programming Laboratory
Lab Sheet 05

01. Write a C++ program that ask user to enter a positive integer. Then the factorial of that number is computed and displayed in the screen.

Sample output:

Input a number to find the factorial: 5

The factorial of the given number is: 120

02. Write a C++ program takes two numbers from the user (a base number and an exponent) and calculates the power.

03. Write a C++ program read 100 numbers and then display the sum of those numbers entered by the user.

04. Write a C++ program to reverse a given integer.

Sample Output:

Input a number: 1234

Reverse number: 4321

05. Write a program in C++ to find the Greatest Common Divisor (GCD) of two numbers.

Sample Output:

Input the first number: 25

Input the second number: 15

The Greatest Common Divisor is: 5

06. Write a program in C++ to find the sum of digits of a given number.

Sample Output:

Input a number: 1234

The sum of digits of 1234 is: 10

07. Write a C++ Program to print half pyramid using *characters.

Sample Output:

Enter the number of rows: 5

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

08. Write a C++ Program to print inverted half pyramid using * characters.

Sample Output:

Enter the number of rows: 5

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

09. Write a C++ program to print full star pyramid pattern.

```
Enter number of rows: 7
*
***
*****
*****
*****
*****
*****
```

10. Write a C++ program to print inverted full star pyramid pattern.

```
Enter number of rows: 7
* * * * *
* * * * *
* * * * *
* * * *
* * * *
* * *
* *
*
```