**Structured Programming Language Sessional**

**Course Code: CSE 106**

**Lab-5 Evaluation and Practice**

**Problem 1:** Find the sum of the following series: 1^1 + 2^2 + 3^3 + ... ... ... + n^n**. You cannot use pow () function.**

**Problem 2:** Program to print mirror pyramid**.**

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**Problem 3:** Take an integer n as input. Print all the prime numbers from 1 to n. Then print how many primes there were up to n.

E.g. Input: 10

Output: 2 3 5 7

Total Prime: 4

**Problem 4:** Determine if an input sequence is strictly increasing or not. A sequence is strictly increasing if each element of the sequence is always greater than the previous ones. The input process will end when a 0 is found. **You will not use array for this problem**.

**Problem 5: Program to print the following pyramid.**

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**13579**

**3579**

**579**

**79**

**9**

**1**

**121**

**12321**

**1234321**

**123454321**

**Problem 6: C program to Calculate (1) + (1+2) + (1+2+3) + (1+2+3+4) + ... + (1+2+3+4+...+n) series**

**Problem 7: Write a c program to find out the sum of series 1 + 2 + 4 + 8**

**Problem 8: C program to find sum of following series:1+ 1/2 + 1/3 + 1/4 + 1/5 + .. 1/N**