EASTERN UNIVERSITY, SRI LANKA
DEPARTMENT OF MATHEMATICS
SECOND EXAMINATION IN SCIENCE (2011/2012)
FIRST SEMESTER (Mar/Apr,2015)
CS 251 – PRACTICAL WORK ON CS 201

ANSWER ALL QUESTIONS   **TIME: TWO HOURS**

1. Write a C++ program to sort the elements in a **Queue** using two **Stacks**.

   Algorithm:
   - (i) Consider two stacks S1 & S2 which will be used to sort queue Q.
   - (ii) Read the elements on to the Queue Q.
   - (iii) Move all the elements from Q onto S1 i.e dequeue all the elements from Q and push them into S1.
   - (iv) Move all elements from S1 into S2 except the minimum element which is enqueued into Q.
   - (v) Now move all elements from S2 into S1 except the minimum element which is enqueued into Q.
   - (vi) Repeat steps (iv) & (v) till both the stacks are empty.

2. Write a C++ program to find out the Pascal triangle using **recursion**.