Homework 2 of CS 3211, 2010, Total 5 marks

Please submit in the IVLE workbin by Mon 8 March 2010 before 11:59 PM. Kindly note that there will be <u>no extensions</u>. If you are not finished by the deadline, please submit whatever partial answer you may have - this is better than not submitting at all. Only submissions in the IVLE Workbin will be graded. Submissions sent by e-mail, unfortunately, cannot be considered.

Upload one single file containing the program. Your argument about why your Java program prevents double booking should appear as comments at the beginning of this file.

If your tutor is Seth, upload your file to the folder **HW2-Seth**

If your tutor is Dawei, upload your file to the folder HW2-Dawei

If your tutor is Abhik, upload your file to the folder HW2-Abhik

<u>Implementing a computer-controlled seat reservation system in Java. [5 marks]</u>

A central computer connected to remote terminals is used to automate seat reservation for a concert hall. A booking clerk can display the current state of reservations on terminal screen. To book a seat, a client chooses a free seat and the clerk enters the number of the chosen seat, thereby issuing a ticket. A method is required to prevent double booking of the same seat by multiple clients from different terminals.

Implement the seat reservation system in Java. Informally argue that your implementation prevents double-booking of the same seat.