Course Number	*CSci 120*
Descriptive Title	*Object-oriented Programming*
Programming Language	*Java*

Problem Number	*4*
Activity Title	*Airline Seats*

Procedure Proper:

1. Write a program to assign passengers seats in an airplane. Assume a small airplane with seat numbering as follows:

   1 A B C D
   2 A B C D
   3 A B C D
   4 A B C D
   5 A B C D
   6 A B C D
   7 A B C D

2. The program should display the seat pattern, with an 'X' marking the seats already assigned. For example, after seats 1A, 2B, and 4C are taken, the display should look like this:

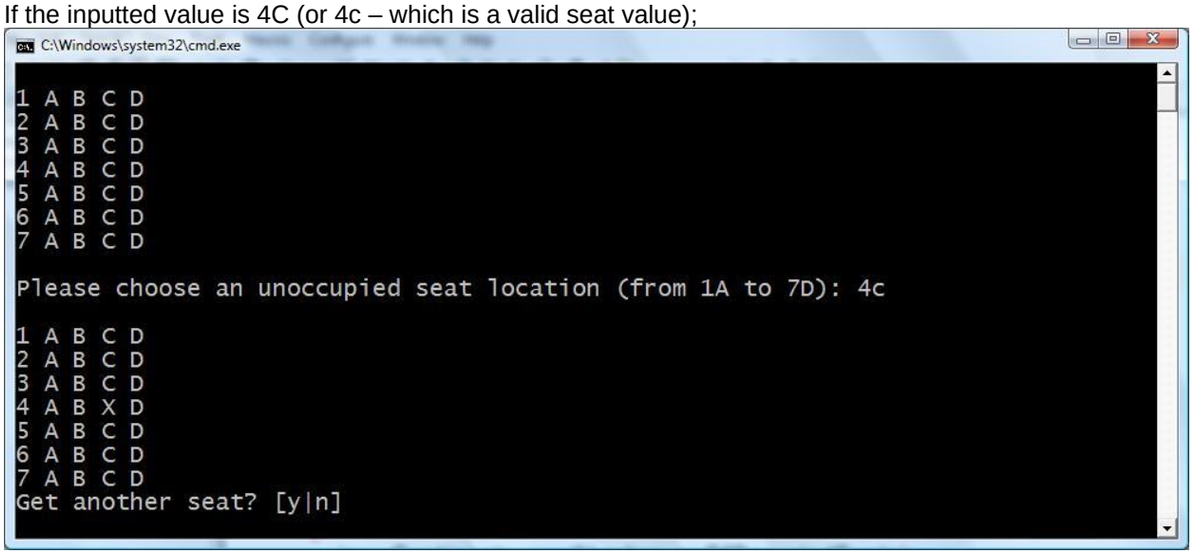
   1 X B C D
   2 A X C D
   3 A B C D
   4 A B X D
   5 A B C D
   6 A B C D
   7 A B C D

3. After displaying the seats available, the program prompts for the seat desired, the user types in a seat, and then the display of available seats is updated. This continues until all seats are filled or until the user signals that the program should end. If the user types in a seat that is already assigned, the program should say that that seat is occupied and ask for another choice.

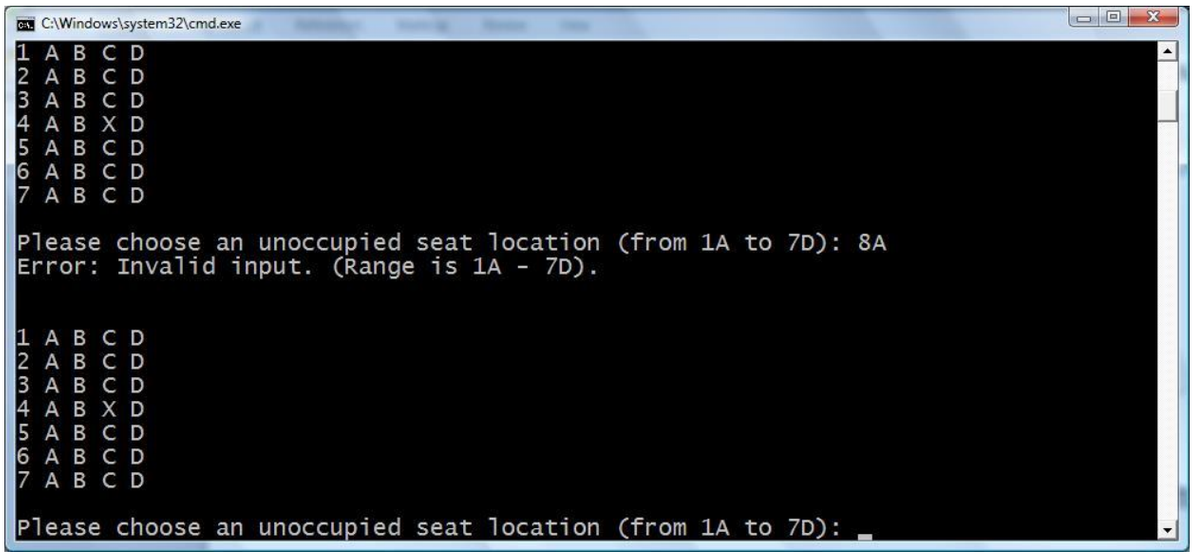
Note:
- ✓ You need to work with this problem using a two-dimensional array.
- ✓ You might need to create some helper functions to at least easily solve the problem.

Runtime Requirement(s):

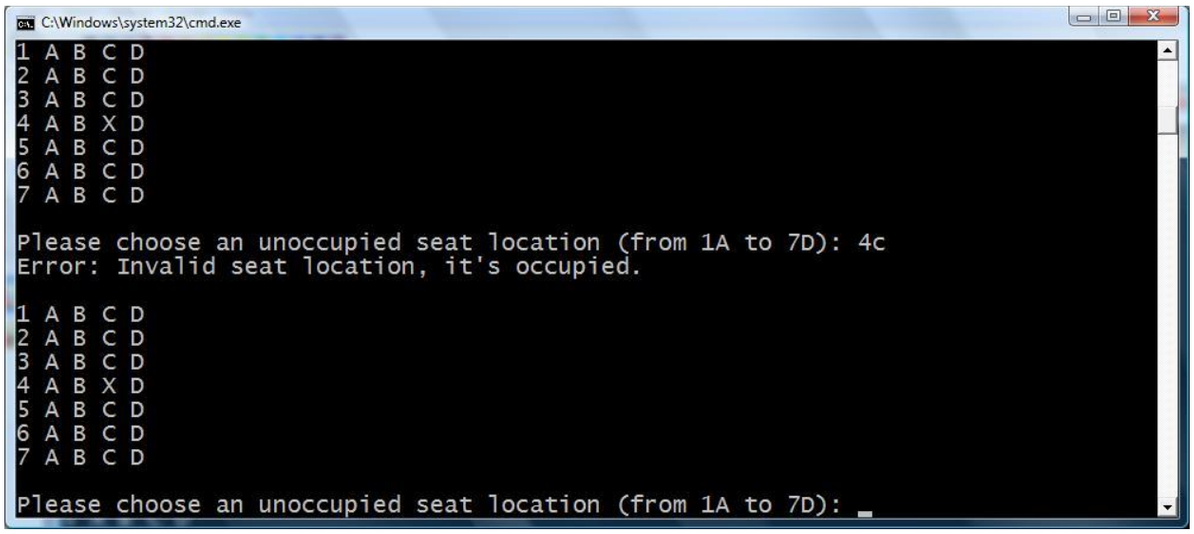
1. If the inputted value is 4C (or 4c – which is a valid seat value);



2. If the inputted value is 8A (or 8a – which is an invalid value);



3. If the inputted value is 4C (or 4c – which is already a taken seat);



4. If the inputted value is 6A (or 6a – which is a valid seat value);