CS 3331
Battle Ship Game

Assignment 1: Warmup Java Programming Exercise

Due September 10th by End of Day on Blackboard

This is a Java warm up assignment. For this assignment, you are encouraged to get help from course Instructor, TA, and IA.

Aim:
Write a simple stand-alone Java program from scratch.

Simple geometrical reasoning is at the core of Battleships. One important notion is adjacency, with two sub-types: edge adjacency and corner adjacency. For example, the square (4,3) is edge-adjacent to the square (3,3), it is corner-adjacent to the square (3,2), and it is not adjacent to the square (6,7).

Write a program that reads a square from the user, and prints out three lists:
1) a list of all edge-adjacent squares,
2) a list of all corner-adjacent squares, and
3) a list of all squares which are not adjacent at all.

Our version of battleships is played on a 9 by 9 board. The lower-left square is (0,0). As noted, the program will read from the console a shot specification. You can decide which formats to handle. They may include, for example, specifications like

(5, 5) 3 0 4,1 a7 b 2

An A-level program will handle all the input formats illustrated, output correct answers, be clearly written, and be well designed.

What to submit on Blackboard:
Submit your code and a sample test run with outputs to demonstrate that your program runs correctly.

Submit by the deadline. Late assignments are not accepted.