Network Applications Programming - Homework 4
(Tic-tac-toe on-line game)

Motivation:

In class, you have learned how to write a socket program by using Java. Also, you have learned how to create Java threads. In this homework, you are asked to develop an on-line game in Java socket programming.

Requirements:

This homework asks you to develop a tic-tac-toe "on-line" game. One game server and at least two clients are necessary. When a player logins to the server, he or she has to stay in a **"waiting room"** to wait for other players. The server should show some necessary information for the waiting room, for example, the players who are currently on-line and their past scores. Then, the player can choose another player or the server can recommend some players for him or her. Notice that the server has to create a **thread** for each player. Of course, since you use Java, it is expected that you can develop a "fascinating" user interface.

Grading Policy:

You need to submit your codes and demonstrate your program to TA. The due day of this homework is **06/12**. You will get **no point** if you do NOT demonstrate your program (even if you submit your codes). Discussion among your classmates is encouraged. However, plagiarists will get **ZERO point**. Below are the points you can get in this homework:

Items	Points
Socket connection	10%
Waiting room	15%
Java threads	20%
Tic-tac-toe on-line game (user interface)	45%
Code comments & README file	10%
Some extra functions (developed by yourself)	30%

Total points: 130%