

# Computer Networks Mini Project

## TicTacToe Game Using Socket Server

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### Abstract:

This is a simple game of tic-tac-toe developed in Python. It allows two players to play with one another on different command lines through networking. The server starts the game by first running ***server.py***, waiting for the client to connect by then running ***client.py***. Once they're connected, the game itself starts.

The server starts as "**X**" and goes first, and the client is "**O**." The players choose the square they would like to use with coordinates; both "**A1**" and "**1A**" would be accepted, for example. The game proceeds, with the players taking turns until one wins or the game is a draw. The host, then the client, is asked whether they'd like a rematch. If both agree, the game starts anew.

Socket programming is a way of connecting two nodes on a network to communicate with each other. One socket(node) listens on a particular port at **an IP**, while the other socket reaches out to the other to form a connection. The server forms the listener socket while the client reaches out to the server.