

Interactive Two-Player Tetris

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We will implement a tetris game that involves two players playing on separate terminals. The game will be played on a 10-column, 20-row grid on the video display. The seven standard tetris shapes fall from the top of the screen in a random sequence generated by a random number generator in Verilog. The object of the game is to manipulate these shapes by translation and rotation to create a horizontal line at the bottom with no gaps. When such a line is created, it disappears, earning 10 points. Whenever one player clears rows on their terminal, the game sends notification through a serial port connection between the two labkits to increase the other player's speed by a number proportional to the number of rows cleared. When the stack of tetris shapes reaches the top of the grid and no new tetris shapes are able to enter, the player loses and his opponent wins.