

# Dominoes programming exercise

Dominoes is a family of games played with rectangular tiles. Each tile is divided into two square ends. Each end is marked with a number (one to six) of spots or is blank. There are 28 tiles, one for each combination of spots and blanks (see image).

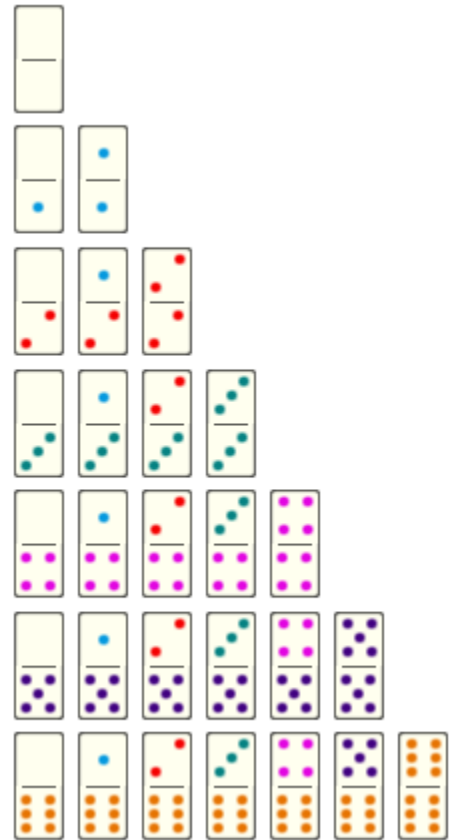
Write a program which allows two players to play Dominoes against each other:

- The 28 tiles are shuffled face down and form the stock. Each player draws seven tiles.
- Pick a random tile to start the line of play.
- The players alternately extend the line of play with one tile at one of its two ends;
- A tile may only be placed next to another tile, if their respective values on the connecting ends are identical.
- If a player is unable to place a valid tile, they must keep on pulling tiles from the stock until they can.
- The game ends when one player wins by playing their last tile.
- You're not supposed to create an interactive application. Just write a program that will follow the rules above.

Try to create the program without the use of frameworks.

The program should show the game progress via stdout or in an HTML page. This might look something like this:

```
Game starting with first tile: <4:1>
Alice plays <0:4> to connect to tile <4:1> on the board
Board is now: <0:4> <4:1>
Bob plays <0:5> to connect to tile <0:4> on the board
Board is now: <5:0> <0:4> <4:1>
Alice plays <1:1> to connect to tile <1:4> on the board
Board is now: <5:0> <0:4> <4:1> <1:1>
Bob can't play, drawing tile <1:6>
Bob plays <1:6> to connect to tile <1:1> on the board
Board is now: <5:0> <0:4> <4:1> <1:1> <1:6>
Alice plays <6:6> to connect to tile <1:6> on the board
Board is now: <5:0> <0:4> <4:1> <1:1> <1:6> <6:6>
Bob plays <4:6> to connect to tile <6:6> on the board
Board is now: <5:0> <0:4> <4:1> <1:1> <1:6> <6:6> <4:6>
Alice plays <5:5> to connect to tile <0:5> on the board
Board is now: <5:5> <5:0> <0:4> <4:1> <1:1> <1:6> <6:6> <4:6>
Bob plays <3:4> to connect to tile <4:6> on the board
Board is now: <5:5> <5:0> <0:4> <4:1> <1:1> <1:6> <6:6> <4:6> <3:4>
Alice plays <0:3> to connect to tile <3:4> on the board
Board is now: <5:5> <5:0> <0:4> <4:1> <1:1> <1:6> <6:6> <4:6> <3:4> <0:3>
Bob can't play, drawing tile <1:5>
Bob plays <1:5> to connect to tile <5:5> on the board
Board is now: <1:5> <5:5> <5:0> <0:4> <4:1> <1:1> <1:6> <6:6> <4:6> <3:4> <0:3>
Alice plays <0:2> to connect to tile <0:3> on the board
Board is now: <1:5> <5:5> <5:0> <0:4> <4:1> <1:1> <1:6> <6:6> <4:6> <3:4> <0:3> <0:2>
Bob plays <2:3> to connect to tile <0:2> on the board
Board is now: <1:5> <5:5> <5:0> <0:4> <4:1> <1:1> <1:6> <6:6> <4:6> <3:4> <0:3> <0:2> <2:3>
Alice plays <0:1> to connect to tile <1:5> on the board
Board is now: <0:1> <1:5> <5:5> <5:0> <0:4> <4:1> <1:1> <1:6> <6:6> <4:6> <3:4> <0:3> <0:2> <2:3>
Player Alice has won!
```



Please pay close attention to correctness, clarity and understandability of the code you write.