

Console Roulette

Roulette is a popular casino game. The aim of the exercise is to create a simple command line multiplayer version of the game.

On start-up, load a file which contains a list of player's names:

Input file 1
Tiki_Monkey
Barbara

Once started, it should read lines from the console, each line will contain the player's name, what they want to bet on (either a number from 1-36, EVEN or ODD), and how much they want to bet:

Console input 1
Tiki_Monkey 2 1.0

Or

Console input 2
Barbara EVEN 3.0

The application should support multiple bets from the same user within a round.

Every 30 seconds the game should choose a random number between 0 and 36 (inclusive) for the ball to land on.

- If the number is 1-36 then any bet on that number wins, and the player wins 36x the bet's amount.
- If the number is even, any bet on EVEN wins, and the player wins 2x the bet's amount.
- If the number is odd, any bet on ODD wins, and the player wins 2x the bet's amount.
- All other bets lose.

It must be possible to place bets and choose a random number concurrently.

The game should print to the console the number and for each bet - the player's name, the bet, whether they won or lost, and how much they won:

Output 1			
Number: 4			
Player	Bet	Outcome	Winnings

Tiki_Monkey	2	LOSE	0.0
Barbara	EVEN	WIN	6.0

Bets are cleared after each betting round.

Optional Bonus Question

We'd like to print out the total amount a player has won and bet. The input file (with players' names) should have optional "total win" and "total bet" comma separated values which are the amounts player has won and bet in the past. No value should be treated as zero.

Input File 2
Tiki_Monkey,1.0,2.0
Barbara,2.0,1.0

After each number is chosen print out the totals in a tabular format (after the previous output is printed):

Output 2

Player	Total Win	Total Bet

Tiki_Monkey	1.0	3.0
Barbara	8.0	4.0

Tiki_Monkey brought in total win 1.0 and total bet 2.0. He bet 1.0 on number 2 and lost so his total bet has increased to 3.0.

Barbara brought in total win 2.0 and total bet 1.0. She bet 3.0 on EVEN and won 6.0. Hence her total win is now $2.0 + 6.0 = 8.0$ and her total bet is $1.0 + 3.0 = 4.0$.