

Develop a game with multiple computer players (console application).

The goal of the game is to guess the weight of a fruit basket.

The weight of the basket will be between 40 – 140 kilos. (Whole numbers)

Rules:

The game ends when a player identifies the weight correctly or when 100 attempts were completed.

The game has 5 types of players:

- 1) Random player: guesses a random number between 40 and 140.
- 2) Memory player: guesses a random number between 40 and 140 but does not try the same number more than once.
- 3) Thorough player: tries all numbers by order – 41,42,43 ...
- 4) Cheater player: guesses a random number between 40 and 140 – but does not try any of the numbers that other players had already tried.
- 5) Thorough Cheater player: tries all numbers by order – 41,42,43 ... but skips numbers that were already been tried before by any of the players.

If a player guessed a number incorrectly – he will have to wait the absolute delta (between the real weight and his guess) in milliseconds.

For an example: if the actual weight of the basket is 100 – and a player guessed 70 – the player will wait (sleep) for 30 milliseconds. If his guess was 130 – he will also sleep for 30 milliseconds.

Inputs:

1. The number of participating players – 2 through 8
2. For each player – his name and his type.

Outputs:

1. The real weight of the basket.
2. At the end of the game:
  - a. If there was a winner – his name and total amount of attempts in the game.
  - b. In case there was no winner – the name of the player who was the closest (in absolute value) and his guess. If there were more than one – the one that was the first. Also, his guess should be printed as well.

Bonus:

1. Finish the game not only if there were 100 attempts but also if 1500 milliseconds passed.

The solution should be given via a git repo or a zip file.