Katarina is developing a two-player dice game. The players roll two 6-sided dice each and get points depending on what they roll. There are 5 rounds in a game.

In each round, each player rolls the two dice.

The rules are:

• The points rolled on each player's dice are added to their score. • If the total is an even number, an additional 10 points are added to their score.

• If the total is an odd number, 5 points are subtracted from their score.

• If they roll a double, they get to roll one extra die and get the number of points rolled added to their score.

• The score of a player cannot go below 0 at any point.

• The person with the highest score at the end of the 5 rounds wins.

• If both players have the same score at the end of the 5 rounds, they each roll 1 die and whoever gets the highest score wins (this repeats until someone wins).

   Only authorised players are allowed to play the game. Where appropriate, input from the user should be validated.

Design, develop, test, and evaluate a program that:

Allows two players to enter their details, which are then authenticated to ensure that they are authorised players.

Allows each player to roll two 6-sided dice.

Calculates and outputs the points for each round and each player's total score.

Allows the players to play 5 rounds.

If both players have the same score after 5 rounds, allows each player to roll 1 die each until someone wins.

Outputs who has won at the end of the 5 rounds.

Stores the winner's score, and their name, in an external file.

Displays the score and player name of the top 5 winning scores from the external file.