

## A - PRODUCT DESCRIPTION - 12 MARKS

Your task is to create a basic computer game for young learners (somewhere in the age range of 6 - 10). You can decide on the type of game you want to create but there are some basics that the game must include:

- Local storage for up to 10 players, each player with a unique identifier, and top 10 scores.
- Ability to display users with single highest and lowest scores.
- Display users with scores sorted from highest to lowest.
- Display users with scores sorted from lowest to highest.
- Display overall top 10 scores and usernames.
- Ability to search for players.

Your `main class` should contain the user menu. Everything else should be in separate classes/methods.

### THE PROPOSED PRODUCT (6 points)

1. Outline the proposed product, with explicit reference to the problem/scenario.
2. Compare to other possible existing (or non-existent) solutions and justify why your product will be the better option.
3. What programming language/IDE will you use? Justify your choice.

A simple maths game

For each round, there will be 4 numbers given

By using addition/ subtraction/ multiplication or division

Java Command line

**Your response here:**

### SUCCESS CRITERIA (6 points)

- A list of what will make the solution successful. Each criteria should be detailed, AND TESTABLE. If you won't be able to test this, don't include it.

**Your response here:**

Success Criteria
Players are needed to enter their username to start the game. Or choose from existing user
Display the following menu at the start of the game: <ul style="list-style-type: none"><li>- Start a new game</li><li>- display users with single highest and lowest scores.</li><li>- Display users with scores sorted from highest to lowest.</li><li>- Display users with scores sorted from lowest to highest.</li><li>- Display overall top 10 scores and usernames.</li><li>- Add friends</li><li>- My profile</li><li>- Quit</li></ul>

Game
The main class will contain the user menu.
Use a plain text file for the database.
Set up for 10 players
Store the username, top 10 scores
Data is saved back to the database when any updates are made

**PRODUCT DESCRIPTION WORD COUNT (Max 600 not including success criteria):**