2. The file, games.txt, contains information on a collection of video games, with one game per line. The exact number of games is unknown beforehand. Each line of data in the file includes the name of the video game, its genre, the user rating (out of 10), and its sales ranking (a unique number from 1 to 10).

For example,

| Cyberpunk_2077 | RPG | 8.7 | 1 |
|-------------------------------------|------------------|-----|----|
| Among_Us | Strategy | 8.5 | 2 |
| Assassin's_Creed_Valhalla | Action-Adventure | 7.9 | 3 |
| Call_of_Duty_Warzone | Shooter | 8.2 | 4 |
| FIFA_21 | Sports | 7.2 | 5 |
| <pre>Ghost_of_Tsushima</pre> | Action-Adventure | 9.3 | 6 |
| Animal_Crossing_New_Horizons | Simulation | 9.0 | 7 |
| Doom_Eternal | Shooter | 8.6 | 8 |
| Hades | RPG | 9.4 | 9 |
| <pre>Final_Fantasy_VII_Remake</pre> | RPG | 8.5 | 10 |
| END | | | |

A game name of "END" indicates the end of the data in the file. There are at most 100 games in the file.

Tasks:

a) Write a struct called **Game** to store the data on a video game. [1 mark]

- b) Write a function, **readData**, which reads the data from **games.txt** and stores it in an array of **Game** structs passed as a parameter. The function returns the number of games in the file.

 [4 marks]
- c) Write a function, **displayGame**, which accepts a **Game** struct as a parameter and displays all the data for that game on the screen. [2 marks]
- d) Write a function, **searchGame**, which accepts an array of **Game** structs, the number of games in the array, and the name of a game as parameters, and returns the location in the array if the game is found. If it is not found, return **-1**. [3 marks]

Q2 Total Marks: 10