

## COMP500 / ENSE501: Week 11 – Exercise:

**EXERCISE NAME:** *Highscores*

The file **highscores\_alpha.bin** stores the top seven scores for a video game. The data in this file is sorted by player name.

The high scores are stored as follows:

- Four characters for the name (including the null terminator);
- **int** for the score.

Write a program that reads in the binary high score file.

To store a high score, declare an appropriate structure type, based upon the description above. Declare an array of seven high score structures and use **fread** to read in the high score file.

Once the program has read in the high scores from file, the program must then sort the data using the **qsort** function from **stdlib.h**.

Finally, the program must write the sorted data back out to file, in a file named **highscores\_sorted.bin**.

Use a hex editor to ensure your output file has been written to disk with the high score data sorted correctly.

Ensure your source code compiles and follows good programming standards. Ensure your program is well tested.