Software Design & Development: Revision Questions 5

1. A data file contains the details of bank accounts held by Ayrshire Bank. The data includes the account number, account name and balance.

   An extract is shown below:

   ```
   00743271, Clare Green, 2539.67
   01356273, James Kerr, 1087.32
   ```

   There are 10000 accounts in the csv file. The bank wants to find out how many accounts have a balance of more than 2000.

   (a) The data from the file is imported into an array of records

   (i) Using a programming language of your choice, define a suitable record structure.

   (ii) Using a programming language of your choice, declare a variable that can store the data for 10000 accounts.

   (b) Using a programming language of your choice, write the code to count the number of accounts with a balance of over 2000

2. A data file contains the details of pupil numbers in different schools. The data includes the school name, school region and number of pupils.

   An extract is shown below:

   ```
   Blair Academy, Aberdeenshire, 1260
   Port High School, Highland, 785
   ```

   There are 500 schools in the csv file.

   (a) The data from the file is imported into an array of records

   (i) Using a programming language of your choice, define a suitable record structure.

   (ii) Using a programming language of your choice, declare a variable that can store the data for 500 accounts.

   (b) Using a programming language of your choice, write the code to find the name of the school with the highest number of pupils

(c) Using a programming language of your choice, write the code to find the name of the school with the lowest number of pupils.