CS19101 PDS laboratory
Assignment8

Write programs for problems 1,2 and 3 in three different files named A8_1_<machine number>_<Roll no.>.c, A8_2_<machine number>_<Roll no.>.c and A8_3_<machine number>_<Roll no.>.c respectively (without the '<' and '>'). Put these three files into a compressed directory named A8_<machine number>_<Roll no.>.zip and submit it.

Example: If your roll number is 19DEP99999 and your machine number is 99, then the names of your files should be A8_1_99_19DEP99999.c, A8_2_99_19DEP99999.c and A8_3_99_19DEP99999.c.

In this problem, we will work with a bank database, which contains the following details of each account holder.

▷ Name. Assume that the name has at most 100 characters, and may include blank spaces. Use a string variable of size 100.

▷ Age. Use an integer variable.

▷ Account number. Use a string variable of size 20.

▷ Account balance. Use an integer variable.

1. In main(), take the number of account holder n as input through the keyboard. Next, open a file named **bank-info.txt** with appropriate mode. Then take the name, age, account number and account balance of each user through the keyboard, and write them in the file **bank-info.txt** in different lines. Then close the file.

   Example: Your file should look as follows after you run your program:
   Yash Agrawal
   33
   GHYN00033
   4000
   Suresh Iyer

62
BHTR556
30000

2. Next, display on the screen the following:

Press Y to print the name and account number of the youngest account holder with balance at least a specified amount
Press D to delete a detail from the file
Press I to enter a new record into the file
Press E to exit

Assume that the user presses one of Y, D, I and E.

If the user presses Y, then take an integer b as input through the keyboard. Then print the name and account number of the youngest account holder whose account balance is at least b. If there are more than one youngest account holders, print the details of the one with lexicographically smallest name. Finally, display the options Y, D, I and E on the screen and ask the user to choose one.

If the user presses D, then take a string s as input through the keyboard. Then, write a piece of code which deletes the record whose account number is s from the file. You may consider using a second file. Finally, display the options Y, D, I and E on the screen and ask the user to choose one.

If the user presses I, then take the name, age, account number and account balance of the new record as inputs through the keyboard, and insert them into the file. Finally, display the options Y, D, I and E on the screen and ask the user to choose one.

If the user presses E, exit the program.

[30 marks]