EL2208 Problem Solving with C Lab. Lab #13

Introduction to structure and command line argument.

Use praktikum.ee.itb.ac.id server as usual.

This lab will serve as an introduction to structure and command line argument in the context of keeping track of a club membership dues. Consider a club that charges membership dues but currently has a large group of members delinquent in paying their dues. The club wants to send out a weekly reminders to those people until they have paid.

The club membership data is stored in a file called "lab13.in". Pass the name of the input file to process as an argument into the main program:

```
lab13 lab13.in
```

Therefore, instead of having the first line

```
int main(void)
```

the first line of your program will be

```
int main(int argc, char *argv[])
```

where the first argument is the number of arguments being passed to the program (**2**), and the second argument is the list of arguments passed as an array of strings. The first string, **argv[0]**, contains "**lab13**" and the second string, **argv[1]**, contains the input filename, "**lab13.in**". To open the file with the **fopen** command, type

fptr = fopen(argv[1],"r");

The club membership data is stored in the "lab13.in" and formatted as follows:

```
10
Roger Rabbit          123   100.00
Mickey Mouse          001   25.75
Mini Mouse            002   0.00
Goofy Goof            013   200.00
....
```

Notice that there is a first line sentinel which tells how many member of the club. The input file is available for download on **praktikum.ee.itb.ac.id**.
We want to put these data into a structure as follows

```
Field Number          Type        Description
   1                  char[30]    Name
   2                  int         Member ID
   3                  double      Amount due
```

Write a complete C program that read the data one line at a time and put the data for that member

into a structure and then make a decision if the member is delinquent. Delinquency is determined by the amount they owed. If the member is delinquent, print the member's name, ID and the amount due to the screen. At the end of the delinquent list also print the number of member that are delinquent. Format the output in the following format.:

```
   Roger Rabbit   123 100.00
   Mickey Mouse     1  25.75
     Goofy Goof    13 200.00
    Donald Duck   145  10.15
     Elmer Fudd     6   5.25
   Chicken Hawk     8   1.15
There are   6 delinquent members
```

Demonstrate your code to the lab instructor when you are done.

Submit the code using perl submitter.