PROBLEM SOLVING WITH C - UE19CS151

NAME- BHARGAV NARAYANAN P

SRN- PES2UG19CS088

SECTION F

PROBLEM STATEMENT - Write a program in C to mimic the “delgroup” command on Linux. This command will delete a group. It has to handle 2 files “group” and “gshadow”. Both these files will be in some folder specified by an environment variable PFILE. The program has to take all arguments as command line arguments (Refer man pages for the command line arguments).

delgroup GName (The only argument is the name of the group being deleted)

This program handles three files. Apart from the “group” and “gshadow” files, I have used the “passwd” file to get the primary group id of every user. While the “group” and “gshadow” files contain group information,

the “passwd” file contains user information.

I have used mingw32 for windows os to run the makefile and build the executable.

I have made use of special format specifiers wherever necessary to read the data from the files. I have used four functions in my program.

The main function accepts all input as command line arguments.

The program has been validated for different inputs.

The correct syntax for the command line arguments is:-

delgroup Gname

(here Gname is the group of the name to be deleted).

I have named the executable as ‘delgroup’.

All the three files (group, gshadow and passwd) are in a folder specified by an environment variable “PFILE” . I have set the environment variable to the path of the folder.

I have extracted the environment variable to the main() using getenv().

The program codes are stored in 2.c files(client.c and server.c), 1 interface.h file and 1 makefile.

**IMPORTANT POINTS REGARDING THE GUIDELINES**

1. No global variables have been used in the program.
2. Assigned meaningful names to the variables.
3. The main function has minimal involvement in the main execution of the program.
4. Comment statements included, describing functionality of the code.

Since I couldn’t direct the output of the terminal to a file, I have attached a screenshot of the command prompt below:-

