Assignment 5.2: WriteUp

Code Description

- The code for text editor is fairly simple

- In the text editor one can see the contents of a file

- One can also create a new file and add the data in it

- If the file is already present, the user can either append to that data, or can completely replace the data.

- All the file handling is done using file pointers.

- To implement the file locks, flock() function is used.

- When there are no lock, the output shows "File Unlocked", else they show "File Locked".

```
1.) Add/Edit Files                        1.) Add/Edit Files
2.) View data in a file                   2.) View data in a file
3.) Exit                                  3.) Exit
Enter Choice: 1                           Enter Choice: 1
Enter the file name: 1.txt                Enter the file name: 1.txt
File unlocked                             File locked
File opened!!!                            File opened!!!
The data in the file is: Pritish          The data in the file is: Pritish
Would you like to:-                       Would you like to:-
1.) Add to this data                      1.) Add to this data
2.) Change this data                      2.) Change this data
Input your choice: 1                      Input your choice: 1
Write the data to be added: 1             Write the data to be added: Wadhwa
Data added to the file                    Data added to the file
1.) Add/Edit Files                        1.) Add/Edit Files
2.) View data in a file                   2.) View data in a file
3.) Exit                                  3.) Exit
Enter Choice: 2                           Enter Choice: 2
Enter the file name: 1.txt                Enter the file name: 1.txt
File opened!!!                            File opened!!!
The data in the file is: PritishWadhwa1   The data in the file is: PritishWadhwa
1.) Add/Edit Files                        1.) Add/Edit Files
2.) View data in a file                   2.) View data in a file
3.) Exit                                  3.) Exit
Enter Choice:                             Enter Choice:
```

Logic

- The logic is also pretty simple.

- As soon as one file is opened, flock locks it

- When the same file is accessed to write in, it shows Locked.

- Despite that, the editings can be made as the locks are only advisory.

Makefile

- In the makefile, the code is compiled and run

Shell Script

- The Shell script opens up 2 different terminal windows.

- In each window, the binary of the text editor is already running.

- As soon as you use the exit function of the text editor, the terminal window closes.

```
1  #!/bin/bash
2  gcc Q2_2019440.c -o t1
3  x-terminal-emulator -e ./t1
4  x-terminal-emulator -e ./t1
```