Lab 6 source codes; No Questions to be answered. Programs will be demoed in next lab. Note for Task 2 🡪 there will be explanations for opening the file and compiling that task before updating the code to read the records from the utmp file  
**Task #1**:

Text

Description automatically generated

**Task #2**:

No compilation errors had occurred after attempting to call the openUtmpFile function.

Here is the source code after adding the loop that reads the records in the utmp file and counting the number of logged-in users

Text

Description automatically generated

To check that my finding the number of logged in users was correct, I searched the internet for a command that I can use to check the number of logged-in users and the one I used was called the who command which shows the logged-in users. I compared the number displayed in my program to the number of users displayed on screen with the who command when I was outside of the program in the Linux terminal.

**Task #3 fork1.c**:

Text

Description automatically generatedText

Description automatically generated with medium confidence

The outputs before and after I modified the program remained the same!

**Task #4 forkWait.c**:

Text

Description automatically generatedText

Description automatically generated

The output in this task differed because the program clearly waited for the child process to finish before terminating the program. Before, the program would terminate and the child process message would still print while the program was no longer running.

**Task #5 forkExec.c**:

Text

Description automatically generated  
Text

Description automatically generated

**Task #6**:

Text

Description automatically generated  
Text

Description automatically generated