

Type your information:

Last name:

First name:

MI:

Programming 1

PLEASE READ AND FOLLOWS THE INSTRUCTIONS PROVIDED

Note: Students are NOT allowed to collaborate on this programming assignment or share their work. Individual student work is full expected. Any act of sharing, cheating, or plagiarism will be reported to the appropriate authorities at SUBR and student (s) involved will receive an “F” in the course.

Program Specifications

Using Linux or Unix command-line interpreter, compile and run the program in “**Figure 4.11 Multithreaded C program using the Pthreads API**” of the required textbook or the more detailed version of this program called “**thrd-posix.c**” which can be found at the textbook’s website: www.os-book.com. **DO NOT compile and run this program on Windows machines.** Note that although this program is a C-based program, you can save it as a C++ program and run it using the C++ compiler command. You are required to compile and run the program at the Linux or Unix-based command prompt. Make sure that read and understand how the program operates before to compile and run it.

Submission Requirements

- 1) Name this Word file or document as: **YourLastnameFirstnameProgramming1**. For example, I would name my Word file as:. Notice the letters’ capitalization or uppercasing and there is no space in the file name.
- 2) Name your C or C++ source code or program as: **YourLastnameFirstnameProgramming1**. For example, I would name my program file as:. Your source code or program **MUST** be from the application you used to edit it. As Computer Science students at this level, you should know what I am talking about especially I showed you this in class. Keep in mind these files will have different extensions; therefore, they are two different types of files. Make sure that you fix any issues with the original program.
- 3) Using **Windows default file compression or zipping**, compress or zip your Word and program files above. Name your zip folder as: **YourLastnameFirstnameProgramming1**. For example, I would name my zip folder as: **DO NOT use a third-party application** you compress or zip the two files as I may not be able to access your zip folder. You can use any Windows machine in Computer Science Department to do the zipping. No excuse, please.
- 4) **You are only allowed to upload a zip folder with the “.zip” extension** and which should contain the Word and program files.
- 5) **Upload, submit, and accept your submission in Moodle.** **DO NOT** email me your work else you receive a zero (0). Make sure that your submission does not remain in the “**Draft**” mode by marking the

little checkbox provided during the submission. Your submission will be penalized 20 points if it remains in the “**Draft**” mode.

Program Compilation and Execution

- a) Provide a full screenshot of your program or source code below. Make sure that your screenshot is clearly readable and it shows the information about the application or integrated development environment (IDE) you used to edit the program. **I MUST be able to clearly read your screenshot without any zooming else you lose points.**

Continue below...

- b) Provide a full screenshot of your program compilation and execution below. Make sure that your screenshot is clearly readable and it shows the information about the command line interpreter you used to compile and run your program. **I MUST be able to clearly read your screenshot without any zooming, else you lose points.**

Continue below...

- c) Describe how you would enhance the program to create and run two separate threads. Provide below code snippet that can create two threads. This question determines your understanding of the overall original program.