For the following questions you will need to download, compile, and execute a small program. Using your virtual environment:

1. Type the following command into the terminal window to pull the project repository from GitLab [Note: If you are not on campus, you will need to connect to the UNC Charlotte VPN
2. Links to an external site.
3.]:
   `git clone https://cci-git.charlotte.edu/jbahamon/ITSC_3146_Pthreads`
4. Change directory into the newly created directory (folder) named ITSC_3146_Pthreads.
5. Issue the following command to compile the first program:

   `g++ pthread_test_1.cpp -o p1 -lpthread`
6. Issue the following command to execute the program:

   `./p1`

Notes:

- **Note:** Copy, paste, and modify all necessary commands from this Git command snippet page
- Links to an external site.
- . This will strip out any special characters.
- On questions where you are asked to provide the output, you should copy-paste from your terminal. Do not try to re-type the text.

1. What is the **exact text in the first line** printed by the program?

2. Note the **-lpthread** compiler switch on the command that you issued to compile the program. Issue the following command:
   `g++ pthread_test_1.cpp -o p1_alt`
   You should get an error. What is the EXACT text of the error's second (2nd) line.

3. Why is the command **g++ pthread_test_1.cpp -o p1_alt** producing an error?
   - Because the program has a syntax error.
   - Because the command uses the wrong program name.
   - Because compiling C++ programs that use Pthreads requires the use of the -lpthread option.

4. There is one key difference between the code in **pthread_test_1.cpp** and the code in **pthread_test_2.cpp**. Indicate the line number where this difference occurs in **pthread_test_2.cpp**

5. Describe what the *different* code in **pthread_test_2.cpp** does.

6. Build and run the program named **pthread_test_3.cpp** and examine the output. What is the **exact text in the second line** printed by the program?