

Programming Project 2

CIS355 – Spring 2018

Point Value: 100 points

Project Due Date: **Thursday, Feb 22, 2018**

Submission Instruction

Please submit your source code file to Schoology. The name of the file should be P2_YourLastname_YourFirstname.cpp. Please submit the C++ source code file on Schoology by 11:59pm on the due day.

Program Description

Assume that your computer has 4 CPUs. Write a multithreaded program that runs 4 different threads simultaneously. The entire process will add the first 1,000,000 numbers (from 1 to 1,000,000) to a shared variable *sum*. You need to use a **pthread_mutex_t** to provide mutual exclusion so that the final result of sum is 500,000,500,000

Note: Your program must be compiled and executed on the Ubuntu server, **kermit.fontbonne.edu**, or other Linux/Unix system.

In order to log into the server, you need a username and password. The instructor will email your username and password to each of you.

Steps to log into **kermit.fontbonne.edu**:

1. Open SSH client on your computer.
2. Enter the hostname, username, and port number in the SSH client window.
3. You will be prompted to enter your password. Please enter your password.
4. You should log in to the server successfully.

