# MPI Lab 1

# Part I: Print out “Hello World!”

In this lab, we will start with the first MPI program. Please follow the following steps:

1. Log in the server 163.238.35.10 using your account.

2. Create a new directory with the name of lab1 and then enter the directory.

3. Create a file with the name of *hello.c*. Use vi or other editors you are familiar with (emacs, vi, vim, etc.) to type a program which will print out “Hello World!”. Make sure that the program has two parameters *argc* and *argv* as we discussed in the class.

4. Revise the program *hello.c* to include *MPI\_Init* and *MPI\_Finalize*. In order to use these two functions, what header file do you need?

5. Compile your program, using the following command:

 *mpicc hello.c -o hello*

6. Run the program using the following command.

*mpirun -np 4 ./hello*

7. You should have the following contents:

Hello World!

Hello World!

Hello World!

Hello World!

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