Tutorial - 6

In this tutorial, you will get acquainted with Message-Passing Interface (MPI) by running the hello-world programs that were discussed in the lecture.

1. Download the MPI hello-world program that is available on Moodle (from the Lecture 18: Codes folder) and compile and run the same (either on your laptop/desktop or on AQUA). Convince yourself that the required number of messages are being printed depending on the number of processes you have requested.

2. Modify the given MPI program such that the host-process (designate this as process with rank = 0) sends a "Hello" message to all other processes available in the communicator and all the processes receive and print the message they received.

3. Write an MPI program in which the host-process (designated as process with rank = 0) receives a single integer value from all other processes and the host will receive the values and adds them and prints the final sum to the screen.