

## Distributed Systems

### Assignment 4

Marks[50]

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The aim of this assignment is to set up mpi on your local system and write a simple code to make sure the installation is working. You can refer the following links -

Language constraint: **C**

installation guide: <https://ireneli.eu/2016/02/15/installation/>

introduction to mpi in c: <http://condor.cc.ku.edu/~grobe/docs/intro-MPI-C.shtml>

Write an MPI program to pass a token value (integer) around all processes in a ring-like fashion, and make sure that it doesn't have a deadlock. Include a bash script that compiles and runs your mpi program.

**cmd:** `bash start.sh `token_value` `num_processes``

#### **Output Format:**

Process 1 received token -1 from process 0

Process 2 received token -1 from process 1

Process 3 received token -1 from process 2

Process 4 received token -1 from process 3

Process 0 received token -1 from process 4

**NOTE: Strict actions would be taken against anyone found involved in any kind of plagiarism either from the internet or from other students.**