

## CS 5379 Assignment 2

Due: before midnight of Sep 28, 2023

Barrier synchronization among a group of process works as follows:

For each process in the group, after a process enters the code segment of barrier, it will not leave the code segment until every other process in the group has entered its respective barrier code segment.

Write an MPI C code using MPI\_Send()'s and MPI\_Recv()'s to implement barrier synchronization among P processes (for general) so that the number of steps of (possibly parallel) send-receive operations is no more than  $2 \log_2 P$ . The function prototype should be

```
void mybarrier(MPI_Comm comm) ;
```