## 6550 Parallel Programming HW1

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## 1 Installing MPI

I already had MPI installed on my computer. I took a Parallel Programming class in the spring and I do not recall how I got it installed. I am using the Windows Subsystem of Linux and I know the process was very easy and straight forward.

## 2 Code

```
#include <iostream>
#include <mpi.h>
#define MCW MPI_COMM_WORLD
using namespace std;
int main(int argc, char **argv){
    int rank, size;
    int data;
    MPI_Init(&argc, &argv);
    MPI_Comm_rank(MCW, &rank);
    MPI_Comm_size(MCW, &size);
    MPI_Send(&rank,1,MPI_INT,(rank+1)%size,0,MCW);
    MPI_Recv(&data,1,MPI_INT,MPI_ANY_SOURCE,0,MCW,MPI_STATUS_IGNORE);
    cout<<"I am "<<rank<<" of "<<size<<"; got a message from "<<data<<endl;</pre>
    MPI_Finalize();
    return 0;
}
```