## COSC 6352, Advanced Operating Systems Fall 2018, Project 01

## Date Assigned: Monday, October 15, 2018 Due Date: Monday, October 29, 2018 at 11:59 pm (on blackboard) (100 points)

The objective of this project is to compare MPI scatter and gather functions with your own scatter and gather functions. Write three different programs, these programs perform the followings:

Program 1	Myscatter.c
Program 2	Mygather.c
Program 3	Myallgather.c

Within each program, collect the time it takes to execute both MPI functions and your functions. Run the program with different number of processes: 4, 6, 8, 10, 12, 14, 16, 18, 20, 22 and 24. Plot the graph (time vs # of processes) for each program.

## **Note:**

## **Submit a zip file containing:**

- 1. A pdf file containing a detailed description the design and the implementation o your project, the jumpshots and the graph (time,#of processes) for each program..
- 2. Your C/C++ code.