

# Solved Problems - Collective Communications



# Problem 1



# Problem 1



Make a program to compute the average of values with MPI\_Reduce. Each process will have a local array with elements in the range [0,1]. These local arrays must be created at random. The program receives only one input argument, which is the size of each local array.

Once these local arrays have been initialized, each process will compute its local sum and local average. Then, you need to reduce all these local sums to compute the global sum. Finally, you need to compute the global average. You should print all the important information in the program.