

Class: Final Year (Computer Science and Engineering)

Year: 2023-24

Semester: 1

Course: High Performance Computing Lab

Practical No. 12

Exam Seat No:

Full Name:

Title of practical: Analysis of MPI Programs

Problem Statement 1:

Execute the MPI program (Program A) with a fixed size broadcast. Plot the performance of the broadcast with varying numbers of processes (with constant message_size). Explain the performance observed.

Screenshot:

Analysis:

Problem Statement 2:

Repeat problem 2 above with varying message sizes for reduction (Program B). Explain the observed performance of the reduction operation.

Screenshot:

Analysis: