Walchand College of Engineering, Sangli
Department of Computer Science and Engineering

Class: Final Year (Computer Science and Engineering)

Year: 2021-22 **Semester:** 1

Course: High Performance Computing Lab

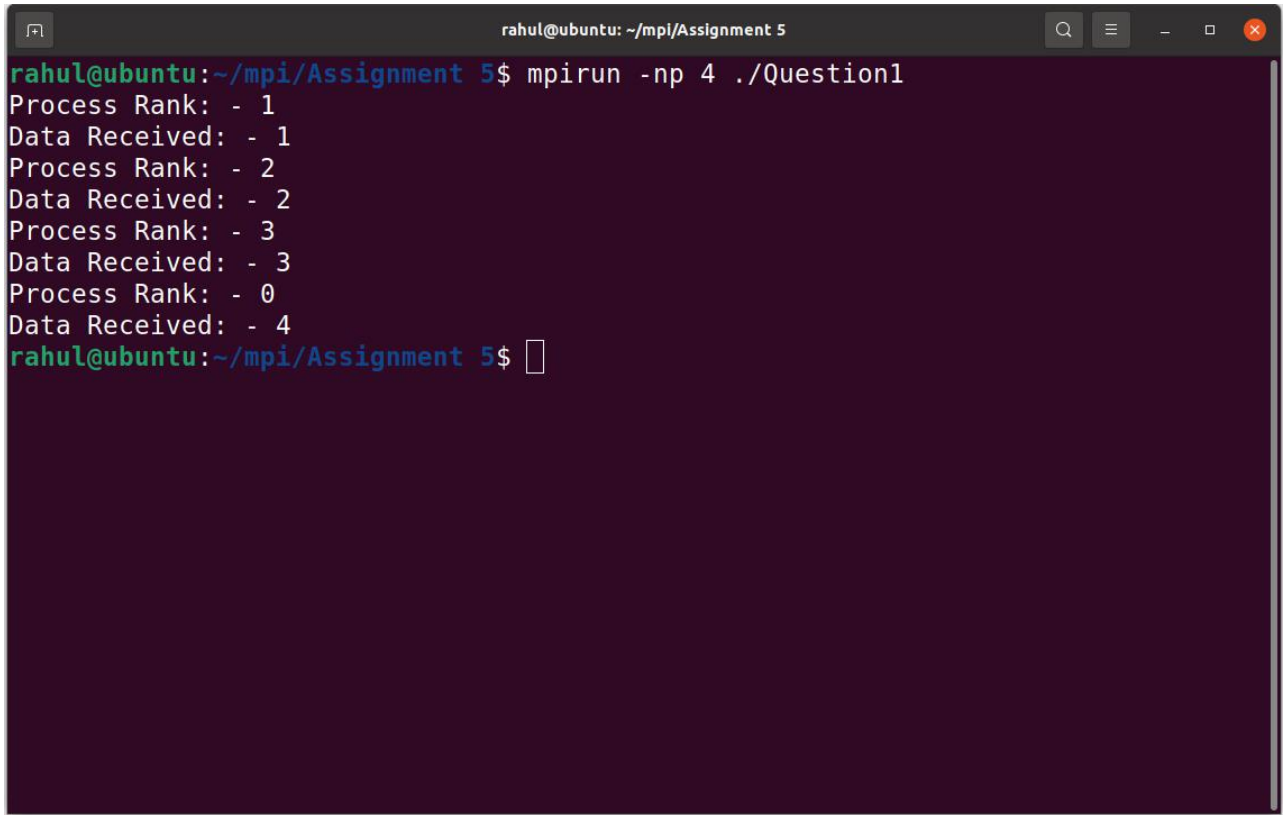
Practical No. 5

Exam Seat No: 2018BTECS00005

Name: Rahul Sanjay Naravadkar

Problem Statement 1: Implement a MPI program to give an example of blocking send and receive between four
processes.

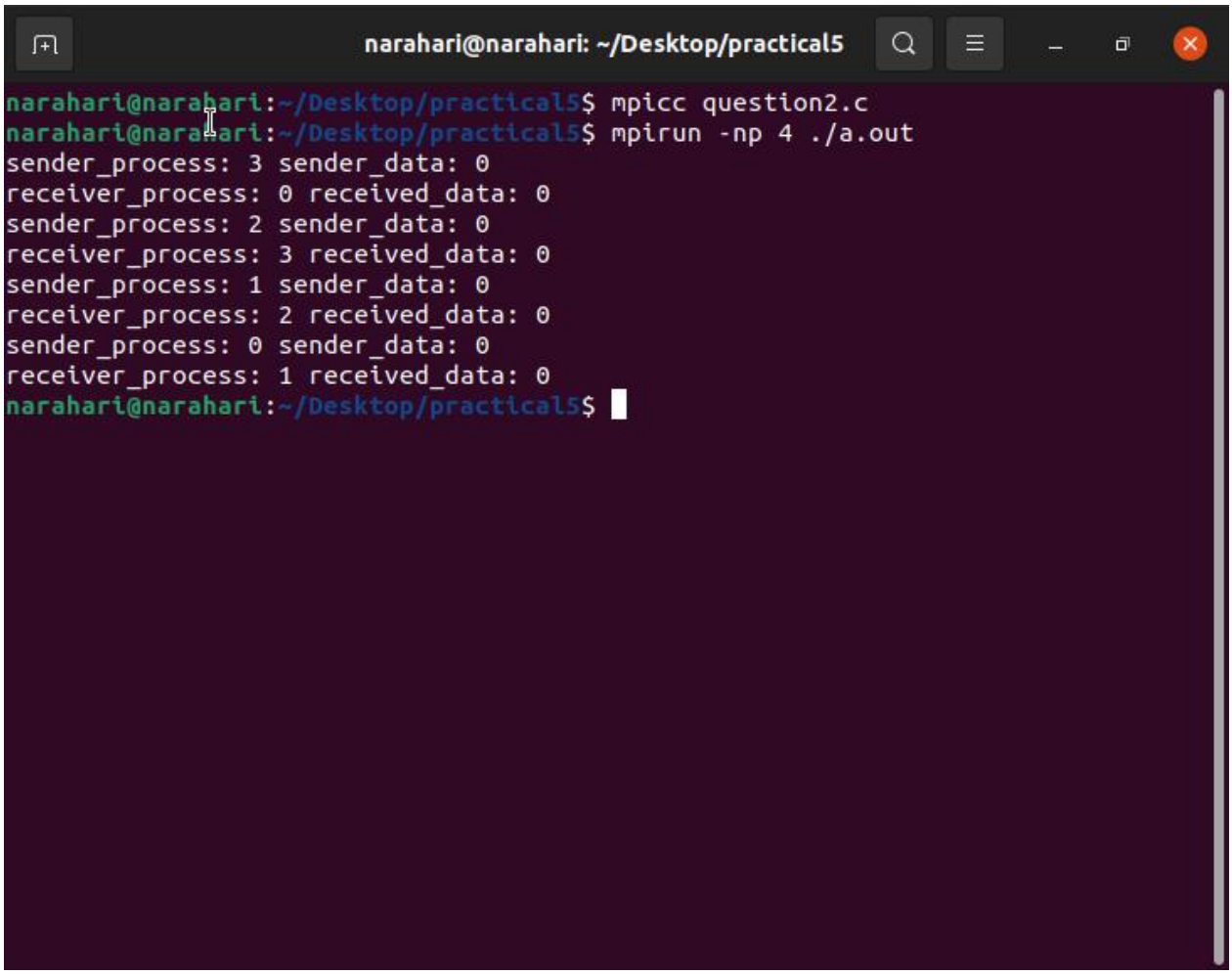
Screenshot 1:



Information #:
Compile: - mpicxx -o Question1 Question1.cpp
Run - mpirun -np 4 ./Question1

Problem statement 2 : Implement MPI program using non-blocking send & receive functions to demonstrate. Nearest neighbour exchange of data in a ring topology

Screenshot:

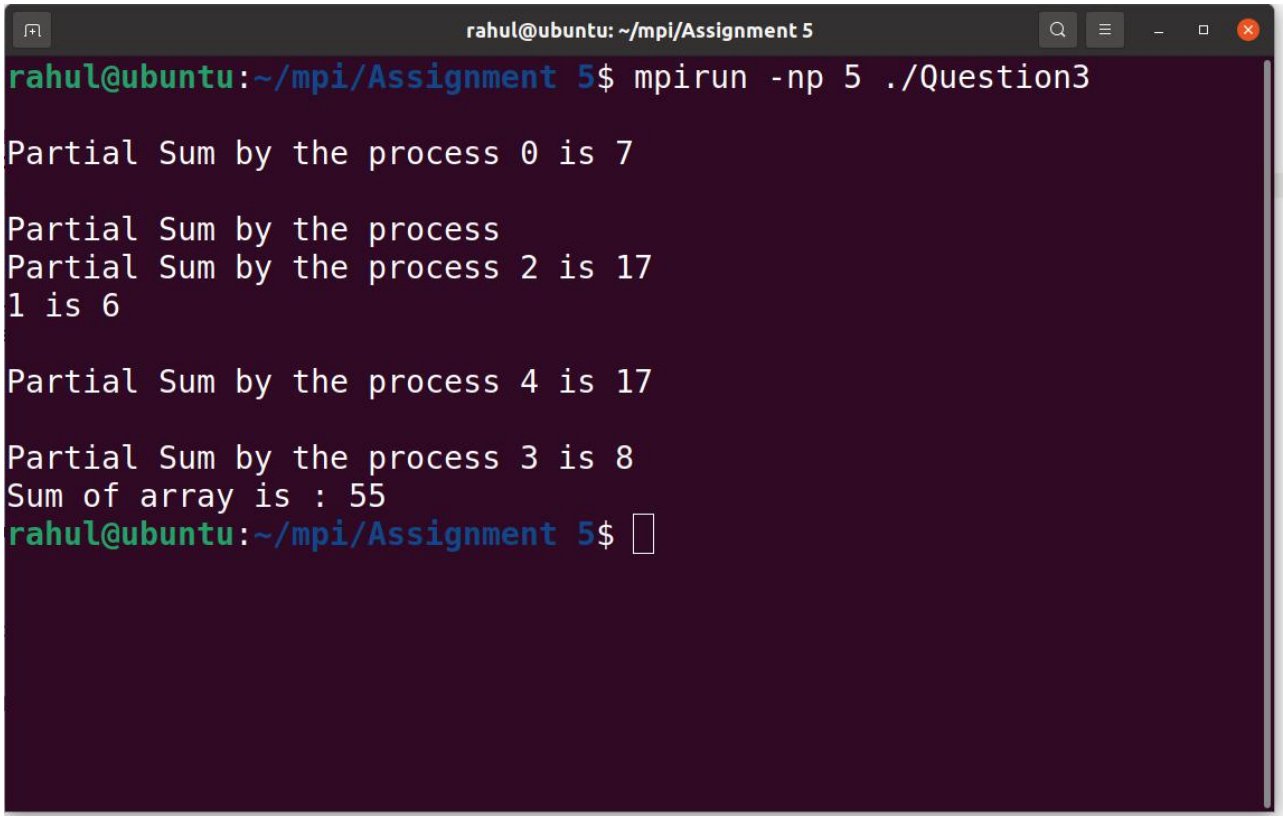


Information #:
Compile: - mpicxx -o Question2 Question2.cpp
Run - mpirun -np 4 ./Question2

Problem Statement 3:

Write a MPI program to find the sum of all the elements of an array A of size n using m number of processes. The two sums then are added to get the final result.

Screenshot:



Information #:

Compile: - mpicxx -o Question3 Question3.cpp

Run - mpirun -np 5 ./Question3

Github Link