**Name : Nikhil Rajendra Danapgol**

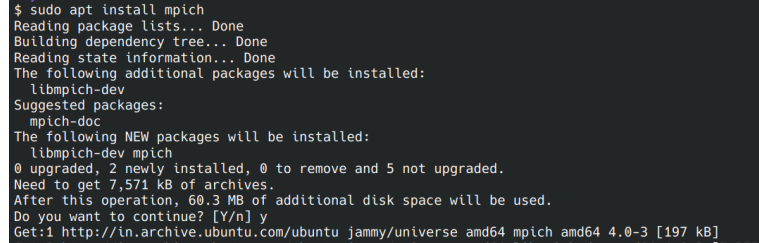
**PRN : 2019BTECS00036**

**HPC Lab**

**Assignment 5**

**Batch : B2**

Title: **Installation of MPI and implementation of basic functions of MPI**

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1. **Implement a simple hello world program by setting number of processes equal to**

#include <mpi.h>

#include <stdio.h>

int main( int argc, char \*argv[] )

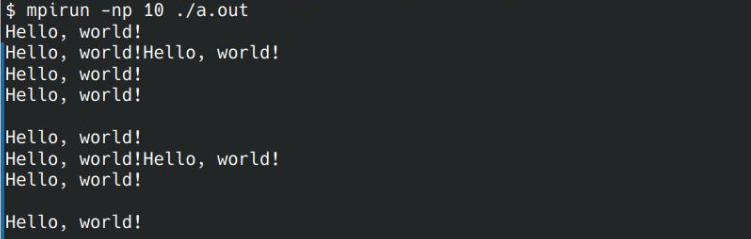
{

MPI\_Init( &argc, &argv );

printf("Hello, world!\n");

return 0;

}



**2. Implement a program to display rank and communicator group of five processes.**

**Code:**

#include <mpi.h>

#include <stdio.h>

int main( int argc, char \*argv[] )

{

MPI\_Init( &argc, &argv );

int rank;

MPI\_Group group;

MPI\_Comm\_group(MPI\_COMM\_WORLD, &group);

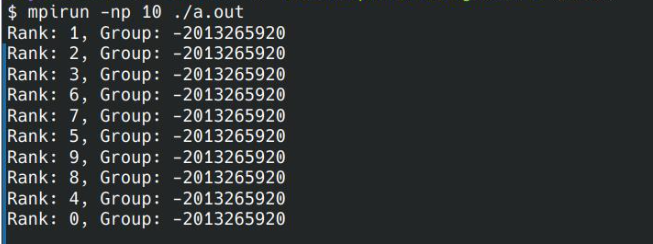
MPI\_Comm\_rank(MPI\_COMM\_WORLD, &rank);

printf("Rank: %d, Group: %d \n", rank, group);

MPI\_Finalize();

return 0;

}



**Github Link:**

[**https://github.com/nd22052000/HPC**](https://github.com/nd22052000/HPC)