CSE4001 – Parallel and Distributed Computing
Slot: L29 + L30

Name: Rathnam Sasidhar Achari
ID: 17BCE0895

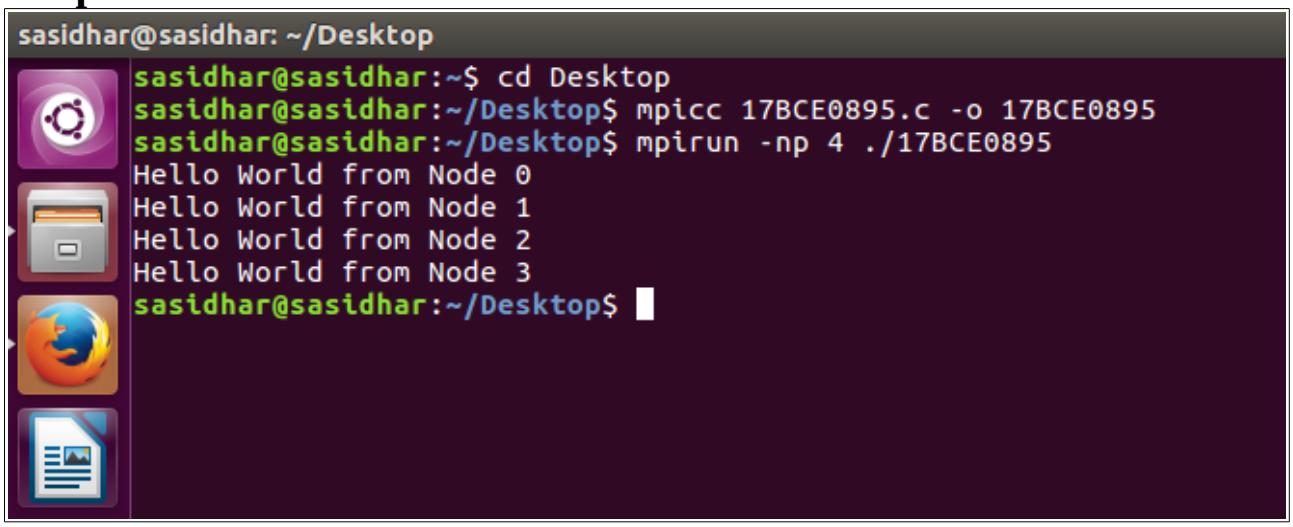
Lab Assignment – 4

Question 1: MPI Hello World

Code:-

```
#include <stdio.h>
#include <mpi.h>
void main(int argc, char **argv)
{
int node;
MPI_Init(&argc,&argv);
MPI_Comm_rank(MPI_COMM_WORLD, &node);
printf("Hello World from Node %d\n",node);
MPI_Finalize();
}
```

Output:



Question 2: MPI Basic

Code:-

```
#include <stdio.h>
#include <mpi.h>
int main(int argc, char ** argv) {
int rank, size;
char name[80];
int length;
MPI_Init(&argc, &argv); // note that argc and argv are passed
// by address
MPI_Comm_rank(MPI_COMM_WORLD,&rank);
MPI_Comm_size(MPI_COMM_WORLD,&size);
MPI_Get_processor_name(name,&length);
printf("Hello MPI: processor %d of %d on %s\n",
rank,size,name);
MPI_Finalize();
}
```

Output: