

Class: Final Year (Computer Science and Engineering)

Year: 2021-22

Semester: 1

Course: High Performance Computing Lab

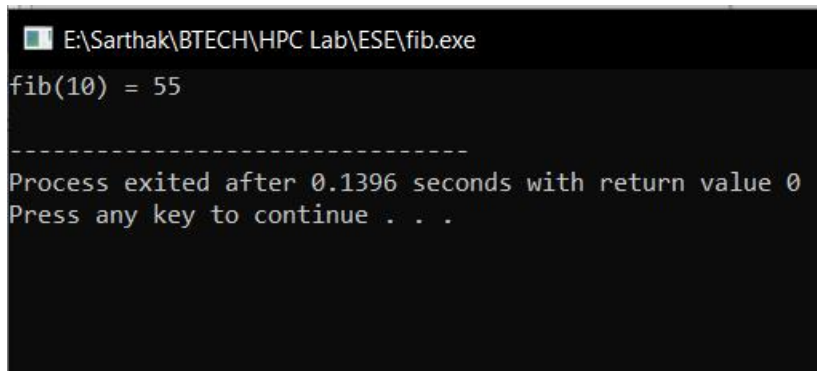
HPC LAB ESE

Exam Seat No:

1. Exam Seat Number - 2018BTECS00019
2. Name - Sarthak Shivgonda Patil

Problem Statement 1: Fibonacci series using OPENMP

Screenshot :

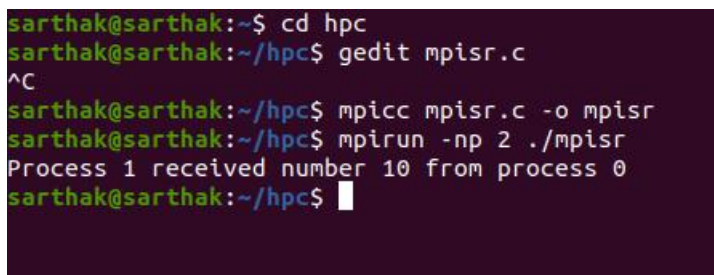


```
E:\Sarthak\BTECH\HPC Lab\ESE\fib.exe
fib(10) = 55
-----
Process exited after 0.1396 seconds with return value 0
Press any key to continue . . .
```

Information : Fibonacci series program output using OPENMP

Problem Statement 2: Send double from one process to another

Screenshot :



```
sarthak@sarthak:~$ cd hpc
sarthak@sarthak:~/hpc$ gedit mpisr.c
^C
sarthak@sarthak:~/hpc$ mpicc mpisr.c -o mpisr
sarthak@sarthak:~/hpc$ mpirun -np 2 ./mpisr
Process 1 received number 10 from process 0
sarthak@sarthak:~/hpc$
```

Information : Sending double of a number using MPI send and receive

Problem Statement 3: Matrix and vector multiplication using CUDA

Screenshot :



```
Product of matrix and vector:  
3      8
```

Information : Product of matrix $\{\{1,2\},\{1,3\}\}$ and vector $\{1,2\}$

Github Link:<https://github.com/sarthak1772000/HPCESE>