Course: High Performance Computing Lab

Practical No 1

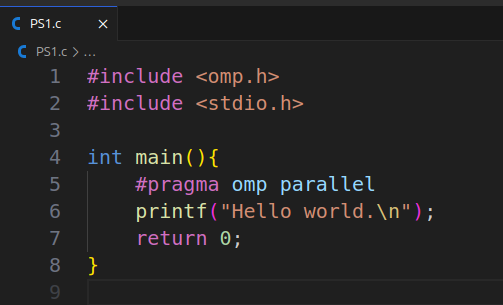
PRN: 23520006

Name: Vivek Katkar

Batch: B6

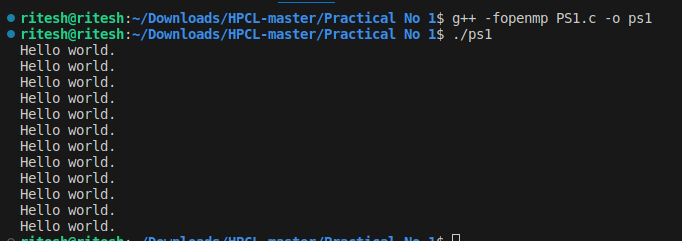
Title: Introduction to OpenMP

Problem Statement 1 – Demonstrate Installation and Running of OpenMP code in C.

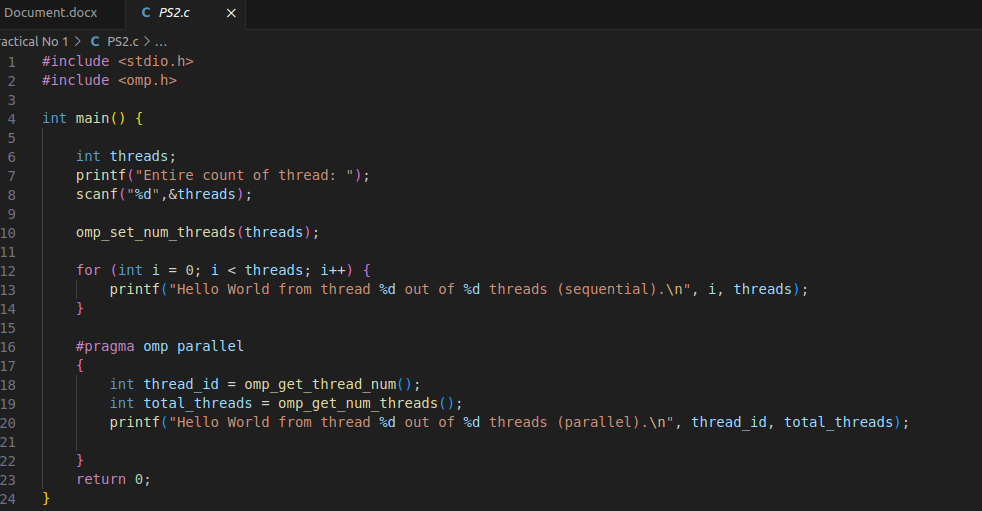


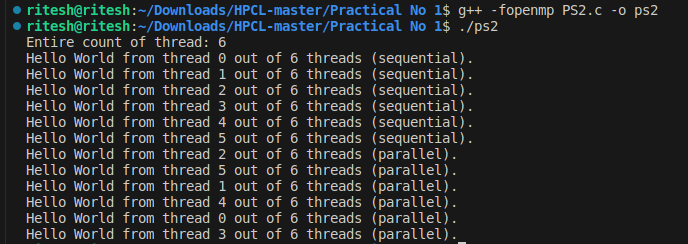
Problem Statement 2 – Print ‘Hello, World’ in Sequential and Parallel in OpenMP

We first ask the user for number of threads – OpenMP allows to set the threads at runtime. Then, we print the Hello, World in sequential – number of times of threads count and then run the code in parallel in each thread.



Code snapshot:



Output snapshot:

GitHub Link: https://github.com/vivekkatkar/hpcl

Problem statement 3: Calculate theoretical FLOPS of your system on which you are running the above codes.

Elaborate the parameters and show calculation.

* ***Clock speed = 4.5 GHz***
* ***core = 6***
* ***FLOPs per cycle = 16***

***GFLOPSFLOPS=6×4.5×16= 432 GFLOPS***