Lab Assignment -1 - 3
GPU Computing (UCS635)

1. To learn the advance computing environment of OpenMP and Learn to perform advance API OpenMP using OpenMP Library.

2. What is the unit to measure computational power of a system? Calculate the computational power of the node given to you (or your Laptop).

3. Write an OpenMP program such that, It should print the name of your family members, such that the names should come from different threads/cores. Also print the respective job id.

4. Write an OpenMP program such that, It should print the sum of square of the thread id's. Also make sure that, each thread should print the square value of their thread id.

5. Consider a variable called "Aryabhatta" declared as 10 (i.e int Arbhatta=10).Write an OpenMP program which should print the result of multiplication of thread id and value of the above variable.

Note*: The variable "Aryabhatta" should be declared as private.

6. Write an OpenMP program that calculates the partial sum of the first 20 natural numbers using parallelism. Each thread should compute a portion of the sum by iterating through a loop. Implement the program using the lastprivate clause to ensure that the final total sum is correctly computed and printed outside the parallel region.