# Parallel and Distributed Computing [CSE 4001]

## Lab Assessment – 1

**Execute an OpenMP program to Counts the number of primes between 1 and N.**

| N | Pi(N), Number of Primes |
|---|---|
| 1 | 0 |
| 2 | 1 |
| 4 | 2 |
| 8 | 4 |
| 16 | 6 |
| 32 | 11 |
| 64 | 18 |
| 128 | 31 |
| 256 | 54 |
| 512 | 97 |
| 1024 | 172 |
| 2048 | 309 |

**Also use function omp_get_wtime to find elapsed wall clock time of the parallel code/program.**

**Find the optimal number of threads which gives minimal execution time.**

| N | Pi(N) | Time (1 Thread) | Time (2 Threads) | Time (4 Threads) |
|---|---|---|---|---|
|  |  |  |  |  |