

Report for Assignment 2 Operating Systems

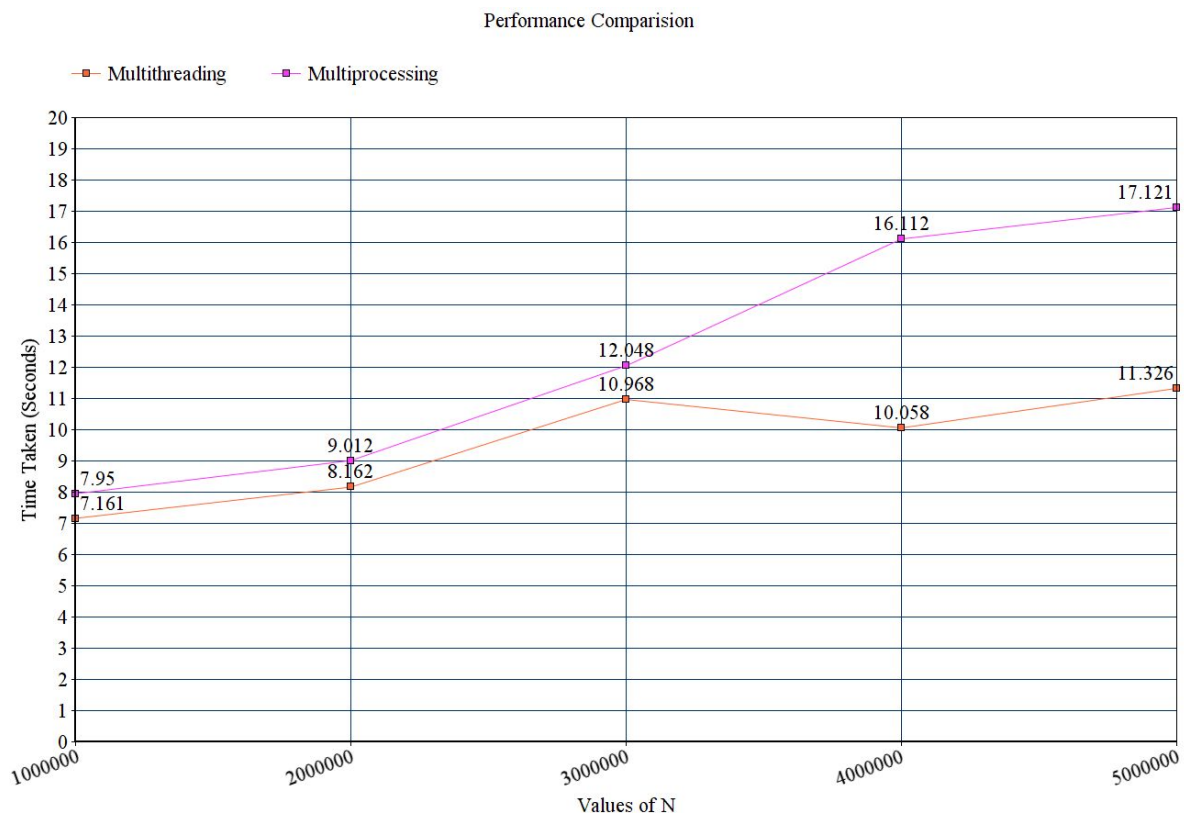
For a large number N (Order of 10^6), we need to print all primes less than n using Multithreading and Multiprocessing.

A 2-d Vector stores the corresponding primes.

For Multithreading, we first create k threads using `std::thread` library, each thread then calls prime function passing the argument as array storing corresponding range and prints all primes from the array.

For Multiprocessing, we create k child processes, each of them calls prime function passing the corresponding array and prints prime numbers in its range.

GRAPH



For small values of n there is not much difference but as N increases the difference b/w multithreading and multiprocessing can be seen as its much simpler to create a thread than to create a process.