

**National University of Computer & Emerging  
Sciences Karachi Campus**

**PDC ( CS3006 ) Proposal**



**Comparing the performance of MPI, OpenMP, and Sequential.**

***Section : 6E***

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## Introduction

**OpenMP** is a way to program on shared memory devices. This means that the parallelism occurs where every parallel thread has access to all of your data.

**MPI** is a way to program on distributed memory devices. This means that the parallelism occurs where every parallel process is working in its own memory space in isolation from the others.

## Description

Inverse of a matrix is calculated in two ways. Inversion algorithm, and adjoint method. Inversion algorithm is fast and easy meanwhile adjoint method includes taking out minors of the matrix, transpose of the matrix, determinant of the matrix and then finally after all of the calculations, inverse is calculated.

We will be comparing the performance of MPI and OpenMP calculating inverse of a Matrix using Adjoint Method, and comparing the performance with sequential calculation.