HIGH PERFORMANCE COMPUTING FOR
MATRIX MULTIPLICATION

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Problem Statement

Define the problem of efficiently multiplying large matrices, which can be computationally intensive and time-consuming.

Emphasize the need for high-performance computing (HPC) solutions to tackle this problem effectively.

Advantages of hpc for matrix multiplication :

Parallel Processing

Performance Improvement

Scalability

Optimized Resource Utilization

Application in Complex Problems

8.Test for Accuracy

1.Prepare Matrices

7.Improve if needed

Approach

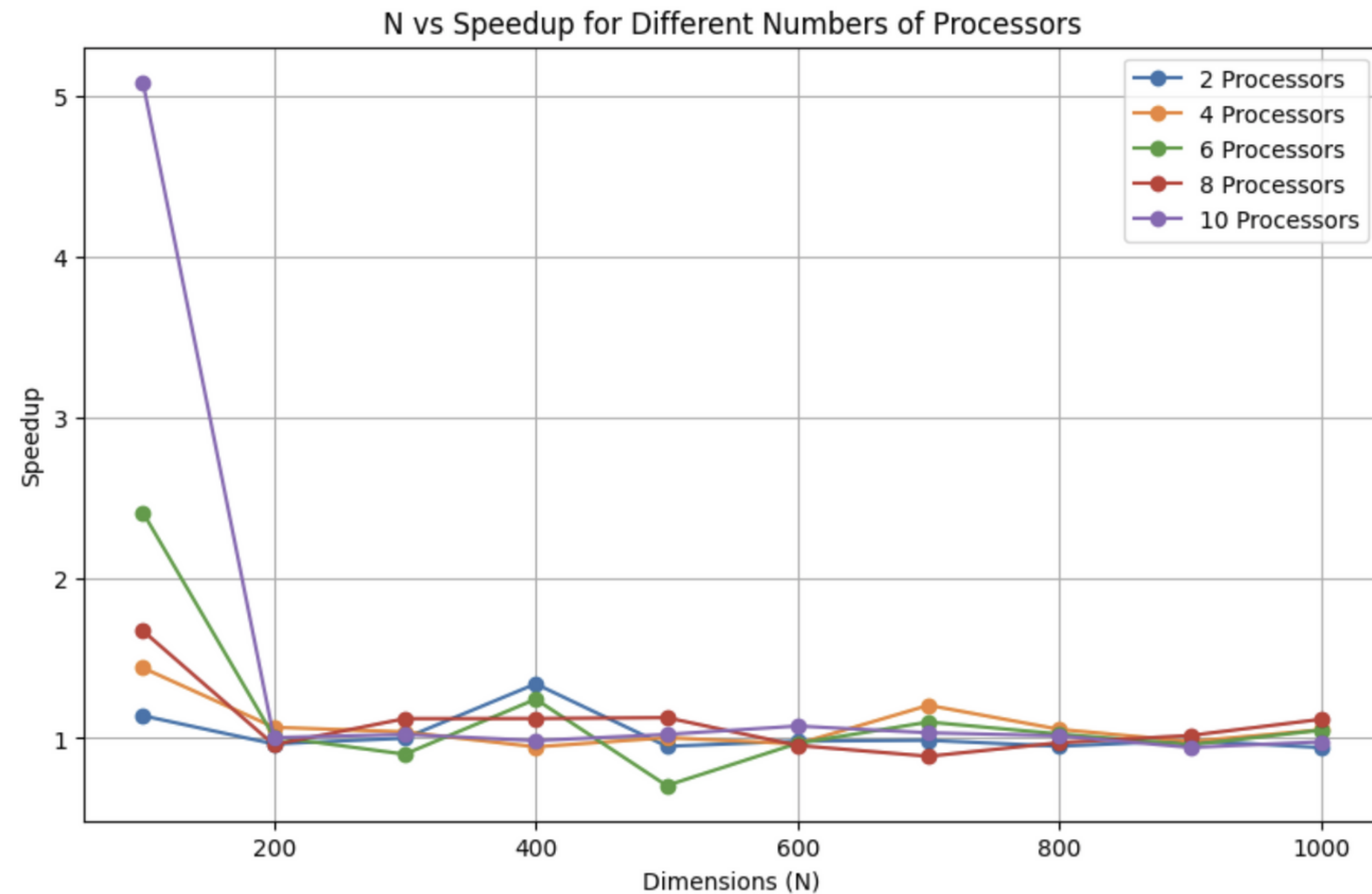2.Use Parallelism

6.Check Performance

3.Share and split works

5.Prevent conflicts

4.Optimze access

N vs Speed Up

N vs Speedup for Different Numbers of Processors

N vs Parallel efficiency

N vs Efficiency for Different Numbers of Processors