| **Parallel Processing Lab Assignment** | |
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| 1. | Write a simple C++ program in MPI to multiply two matrices of size M*x*N and N*x*P. |
| 2. | Write a program in MPI to simulate a simple calculator. Perform each operation using a different process in parallel. |
| 3. | Write a program in C++ to count the words in a file and sort it in descending order of frequency of words i.e. highest occurring word must come first and least occurring word must come last. |
| 4. | Write a MPI program using synchronous send. The sender process sends a word to the receiver. The second process receives the word, toggles each letter of the word and sends it back to the first process. Both processes use synchronous send operations. |
| 5. | Write a MPI program to add an array of size N using two processes . Print the result in the root process. Investigate the amount of time taken by each process. |
| 6. | Write a Cuda program for matrix multiplication. |
| 7. | Write a Cuda program to find out maximum common subsequence. |
| 8. | Given a paragraph and a pattern like %x%. Now write a cuda program to find out the line number where %x% this pattern exists in the given paragraph. |