Lab5: Queries involving the using of the parallel, private, shared, & parallel-for OpenMP pragmas:

Q1.
Illustrate loop parallelism with the for loop by writing a program to calculate the sum of an array in parallel using OpenMP. (Use a shared variable for the result and private variables for loop indices).

Q2.
Implement a program to calculate the square of each element in an array in parallel using OpenMP. Use shared variables for the input array and private variables for the parallel for loop indices.

Q3.
Create a parallel program to calculate the factorial of a number using OpenMP. Use a shared variable for the result, and private variables for loop indices.

Q4.
Write a program to find the minimum element in an array in parallel using OpenMP. Use shared variables for the array and the minimum value, and private variables for loop indices.

Q5.
Implement a program to generate the Fibonacci series in parallel using OpenMP. Use shared variables for the result array and private variables for each thread's local variables.

Q6.
Write a program to transpose a matrix in parallel using OpenMP. Use shared variables for the input and output matrices and private variables for loop indices.

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