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ASSIGNMENT NO – 1

Question 1: How many total thread blocks do we use?

Answer- The matrix size is 1000×1000 , and the default thread block size is 256. So, Number of Blocks is equal to $1000 \times 1000 / 256 = 3906.25$ blocks. As, the number of thread blocks should be integer, so we need 3907 thread blocks.

Question 2: Are all thread blocks full? That is, do all threads in the thread block have data to operate on?

Answer-

No, not all thread blocks are full. That means not all thread blocks have data to operate on.

Question 3: How can this basic Matrix Addition program be improved? (What changes do you think can be made to speed up the code?)

Answer- Matrix addition program speed should increase if shared memory and constant memory can be used to store data and run programs.