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Mar 19 00:50
akash@akash-VirtualBox: ~
akash@akash-VirtualBox:~$ mpicc a2q1.c -o a2q1
akash@akash-VirtualBox:~$ mpirun -np 4 ./a2q1
Estimated PI = 3.141164
akash@akash-VirtualBox:~$ mpicc -fopenmp a2q2.c -o a2q2
akash@akash-VirtualBox:~$ mpirun -np 4 ./a2q2
Execution Time: 0.001516 seconds
Parallel Execution Time: 0.000603 seconds
akash@akash-VirtualBox:~$ mpicc a2q3.c -o a2q3
akash@akash-VirtualBox:~$ mpirun -np 4 ./a2q3
Unsorted array:
52 88 55 28 9 55 37 41 19 49 25 3 71 18 54 0
Sorted array:
0 3 9 18 19 25 28 37 41 49 52 54 55 55 71 88
Execution Time: 0.000029 seconds
akash@akash-VirtualBox:~$ mpicc a2q4.c -o a2q4
akash@akash-VirtualBox:~$ mpirun -np 4 ./a2q4
Final Heat Distribution:
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
100.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 100.00
100.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 100.00
100.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 100.00
100.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 100.00
100.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 100.00
100.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 100.00
100.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 100.00
100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00
Execution Time: 0.000611 seconds
akash@akash-VirtualBox:~$ mpicc a2q5.c -o a2q5
akash@akash-VirtualBox:~$ mpirun -np 4 ./a2q5
Sum of all ranks = 10
akash@akash-VirtualBox:~$
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akash@akash-VirtualBox: ~
akash@akash-VirtualBox:~$ mpicc a2q6.c -o a2q6
akash@akash-VirtualBox:~$ mpirun -np 4 ./a2q6
Dot Product = 100.000000
akash@akash-VirtualBox:~$ mpicc a2q7.c -o a2q7
akash@akash-VirtualBox:~$ mpirun -np 4 ./a2q7
Rank 0: Prefix sum = 1
Rank 1: Prefix sum = 3
Rank 2: Prefix sum = 6
Rank 3: Prefix sum = 10
akash@akash-VirtualBox:~$ mpicc a2q8.c -o a2q8
akash@akash-VirtualBox:~$ mpirun -np 4 ./a2q8
Transposed Matrix:
1.00 2.00 3.00 4.00
5.00 6.00 7.00 8.00
9.00 10.00 11.00 12.00
13.00 14.00 15.00 16.00
akash@akash-VirtualBox:~$
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