Dot:

Sequential/Parallel | threads | Length | Result | time

Sequential 1 10000000 1.000000e+07 0.0120985640

Parallel 1 10000000 1.000000e+07 0.0119740710

Parallel 2 10000000 1.000000e+07 0.0087391510

Parallel 4 10000000 1.000000e+07 0.0052726810

Parallel 8 10000000 1.000000e+07 0.0051024770

Parallel 16 10000000 1.000000e+07 0.0053829720

Sequential 1 10000000 1.000000e+07 0.0145194660

DOT\_PRODUCT

Normal end of execution.

Sequential/Parallel | threads | Length | Result | time

Sequential 1 10000000 1.000000e+07 0.0121539530

Parallel 1 10000000 1.000000e+07 0.0120952960

Parallel 2 10000000 1.000000e+07 0.0096702420

Parallel 4 10000000 1.000000e+07 0.0052891820

Parallel 8 10000000 1.000000e+07 0.0051421610

Parallel 16 10000000 1.000000e+07 0.0054101620

Sequential 1 10000000 1.000000e+07 0.0144132960

DOT\_PRODUCT

Normal end of execution.

Sequential/Parallel | threads | Length | Result | time

Sequential 1 10000000 1.000000e+07 0.0122805650

Parallel 1 10000000 1.000000e+07 0.0120268600

Parallel 2 10000000 1.000000e+07 0.0093563480

Parallel 4 10000000 1.000000e+07 0.0051301020

Parallel 8 10000000 1.000000e+07 0.0050585110

Parallel 16 10000000 1.000000e+07 0.0053757790

Sequential 1 10000000 1.000000e+07 0.0147166080

DOT\_PRODUCT

Normal end of execution.

Sequential/Parallel | threads | Length | Result | time

Sequential 1 10000000 1.000000e+07 0.0124143390

Parallel 1 10000000 1.000000e+07 0.0123107530

Parallel 2 10000000 1.000000e+07 0.0108588370

Parallel 4 10000000 1.000000e+07 0.0055935170

Parallel 8 10000000 1.000000e+07 0.0049847430

Parallel 16 10000000 1.000000e+07 0.0054702890

Sequential 1 10000000 1.000000e+07 0.0148065480

DOT\_PRODUCT

Normal end of execution.

Heat

HEATED\_PLATE\_OPENMP

C++/OpenMP version

A program to solve for the steady state temperature distribution

over a rectangular plate.

Spatial grid of 500 by 500 points.

The iteration will be repeated until the change is <= 0.001

Number of processors available = 16

Number of threads = 1

MEAN = 74.9499

Iteration Change

1 18.7375

2 9.36874

4 4.09882

8 2.28958

16 1.1366

32 0.568201

64 0.282805

128 0.141777

256 0.070808

512 0.035427

1024 0.0177074

2048 0.00885567

4096 0.0044276

8192 0.00221017

16384 0.00104281

16955 0.00099998

Error tolerance achieved.

Wallclock time = 13.4109

HEATED\_PLATE\_OPENMP:

Normal end of execution.

HEATED\_PLATE\_OPENMP

C++/OpenMP version

A program to solve for the steady state temperature distribution

over a rectangular plate.

Spatial grid of 500 by 500 points.

The iteration will be repeated until the change is <= 0.001

Number of processors available = 16

Number of threads = 2

MEAN = 74.9499

Iteration Change

1 18.7375

2 9.36874

4 4.09882

8 2.28958

16 1.1366

32 0.568201

64 0.282805

128 0.141777

256 0.070808

512 0.035427

1024 0.0177074

2048 0.00885567

4096 0.0044276

8192 0.00221017

16384 0.00104281

16955 0.00099998

Error tolerance achieved.

Wallclock time = 6.83496

HEATED\_PLATE\_OPENMP:

Normal end of execution.

HEATED\_PLATE\_OPENMP

C++/OpenMP version

A program to solve for the steady state temperature distribution

over a rectangular plate.

Spatial grid of 500 by 500 points.

The iteration will be repeated until the change is <= 0.001

Number of processors available = 16

Number of threads = 4

MEAN = 74.9499

Iteration Change

1 18.7375

2 9.36874

4 4.09882

8 2.28958

16 1.1366

32 0.568201

64 0.282805

128 0.141777

256 0.070808

512 0.035427

1024 0.0177074

2048 0.00885567

4096 0.0044276

8192 0.00221017

16384 0.00104281

16955 0.00099998

Error tolerance achieved.

Wallclock time = 3.58897

HEATED\_PLATE\_OPENMP:

Normal end of execution.

HEATED\_PLATE\_OPENMP

C++/OpenMP version

A program to solve for the steady state temperature distribution

over a rectangular plate.

Spatial grid of 500 by 500 points.

The iteration will be repeated until the change is <= 0.001

Number of processors available = 16

Number of threads = 8

MEAN = 74.9499

Iteration Change

1 18.7375

2 9.36874

4 4.09882

8 2.28958

16 1.1366

32 0.568201

64 0.282805

128 0.141777

256 0.070808

512 0.035427

1024 0.0177074

2048 0.00885567

4096 0.0044276

8192 0.00221017

16384 0.00104281

16955 0.00099998

Error tolerance achieved.

Wallclock time = 2.13486

HEATED\_PLATE\_OPENMP:

Normal end of execution.

HEATED\_PLATE\_OPENMP

C++/OpenMP version

A program to solve for the steady state temperature distribution

over a rectangular plate.

Spatial grid of 500 by 500 points.

The iteration will be repeated until the change is <= 0.001

Number of processors available = 16

Number of threads = 16

MEAN = 74.9499

Iteration Change

1 18.7375

2 9.36874

4 4.09882

8 2.28958

16 1.1366

32 0.568201

64 0.282805

128 0.141777

256 0.070808

512 0.035427

1024 0.0177074

2048 0.00885567

4096 0.0044276

8192 0.00221017

16384 0.00104281

16955 0.00099998

Error tolerance achieved.

Wallclock time = 1.71605

HEATED\_PLATE\_OPENMP:

Normal end of execution.

HEATED\_PLATE\_OPENMP

C++/OpenMP version

A program to solve for the steady state temperature distribution

over a rectangular plate.

Spatial grid of 500 by 500 points.

The iteration will be repeated until the change is <= 0.001

Number of processors available = 16

Number of threads = 32

MEAN = 74.9499

Iteration Change

1 18.7375

2 9.36874

4 4.09882

8 2.28958

16 1.1366

32 0.568201

64 0.282805

128 0.141777

256 0.070808

512 0.035427

1024 0.0177074

2048 0.00885567

4096 0.0044276

8192 0.00221017

16384 0.00104281

16955 0.00099998

Error tolerance achieved.

Wallclock time = 7.92361

HEATED\_PLATE\_OPENMP:

Normal end of execution.

Quicksort Parallel:

The array with lenght 100000 was sortet in 0.01257894599984866 s

The array with lenght 100000 was sortet in 0.01284963099897141 s

The array with lenght 1000000 was sortet in 0.1025724890005222 s

The array with lenght 1000000 was sortet in 0.1082519239998874 s

The array with lenght 10000000 was sortet in 0.9918862759986951 s

The array with lenght 10000000 was sortet in 0.9523564190021716 s

Sequentiel:

The array with lenght 100000 was sortet in 0.01209410600040428 s

The array with lenght 1000000 was sortet in 0.09453706600015721 s

The array with lenght 10000000 was sortet in 1.081194949000746 s

The array with lenght 100000 was sortet in 0.012196170995594 s

The array with lenght 1000000 was sortet in 0.09448506399348844 s

The array with lenght 10000000 was sortet in 1.081260170001769 s