

```
/*  
 * CPU Report  
 */
```

```
model name      : Intel(R) Core(TM) i7-4770K CPU @ 3.50GHz  
vendor_id       : GenuineIntel  
cpu cores       : 4  
siblings        : 8  
cache size      : 8192 KB
```

```
/*
 * Serie Runtime Report In Seconds
 */

2 100000      :4.51e-04:1.05e-03:1.81e-03:1.05e-03:1.08e-03
2 200000      :1.58e-03:2.97e-03:2.64e-03:2.65e-03:2.65e-03
4 100000      :1.34e-03:1.58e-03:1.12e-03:1.79e-03:1.31e-03
4 200000      :2.43e-03:2.55e-03:1.90e-03:2.63e-03:3.32e-03
6 100000      :1.75e-03:1.16e-03:1.21e-03:9.85e-04:1.15e-03
6 200000      :3.53e-03:3.11e-03:2.65e-03:3.52e-03:2.63e-03
8 100000      :1.48e-03:1.75e-03:2.03e-03:9.86e-04:1.43e-03
8 200000      :2.88e-03:2.88e-03:3.53e-03:3.15e-03:2.60e-03
```

```
/*
 * Parallel Runtime Report In Seconds
 */

2 100000      :2.42e-04:3.15e-04:4.10e-04:2.39e-04:4.33e-04
2 200000      :7.52e-04:4.68e-04:5.76e-04:4.66e-04:5.40e-04
4 100000      :2.15e-04:2.23e-04:1.84e-04:2.03e-04:2.30e-04
4 200000      :3.88e-04:2.85e-04:3.23e-04:5.41e-04:5.11e-04
6 100000      :2.98e-04:1.35e-04:3.04e-04:2.32e-04:2.61e-04
6 200000      :2.58e-04:2.67e-04:3.04e-04:3.55e-04:3.60e-04
8 100000      :1.51e-04:3.02e-04:1.94e-04:1.16e-04:2.46e-04
8 200000      :1.78e-04:1.64e-04:3.42e-04:4.81e-04:3.16e-04
```

```
/*
 * Speedup Report In %
 */

2 100000      :1.86e+02:3.33e+02:4.41e+02:4.39e+02:2.49e+02
2 200000      :2.10e+02:6.35e+02:4.58e+02:5.69e+02:4.91e+02
4 100000      :6.23e+02:7.09e+02:6.09e+02:8.82e+02:5.70e+02
4 200000      :6.26e+02:8.95e+02:5.88e+02:4.86e+02:6.50e+02
6 100000      :5.87e+02:8.59e+02:3.98e+02:4.25e+02:4.41e+02
6 200000      :1.37e+03:1.16e+03:8.72e+02:9.92e+02:7.31e+02
8 100000      :9.80e+02:5.79e+02:1.05e+03:8.50e+02:5.81e+02
8 200000      :1.62e+03:1.76e+03:1.03e+03:6.55e+02:8.23e+02
```

```
/*
 * Parallel Calculation Report
 */

2 Cores CPU - Size Problem 100000
```

Try 1

Runtime 2.42e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	2	50000	100000	1.458333	1.458333
1	2	50000	100000	1.208333	2.666667

Try 2

Runtime 3.15e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	2	50000	100000	1.458333	1.458333
1	2	50000	100000	1.208333	2.666667

Try 3

Runtime 4.10e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	2	50000	100000	1.458333	1.458333
1	2	50000	100000	1.208333	2.666667

Try 4

Runtime 2.39e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	2	50000	100000	1.458333	1.458333
1	2	50000	100000	1.208333	2.666667

Try 5

Runtime 4.33e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	2	50000	100000	1.458333	1.458333
1	2	50000	100000	1.208333	2.666667

2 Cores CPU - Size Problem 200000

Try 1

Runtime 7.52e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	2	100000	200000	1.458333	1.458333
1	2	100000	200000	1.208333	2.666667

Try 2

Runtime 4.68e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	2	100000	200000	1.458333	1.458333
1	2	100000	200000	1.208333	2.666667

Try 3

Runtime 5.76e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	2	100000	200000	1.458333	1.458333
1	2	100000	200000	1.208333	2.666667

Try 4

Runtime 4.66e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	2	100000	200000	1.458333	1.458333
1	2	100000	200000	1.208333	2.666667

Try 5

Runtime 5.40e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	2	100000	200000	1.458333	1.458333
1	2	100000	200000	1.208333	2.666667

4 Cores CPU - Size Problem 100000

Try 1

Runtime 2.15e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	4	25000	100000	0.744792	0.744792
1	4	25000	100000	0.713542	1.458333
2	4	25000	100000	0.651042	2.109375
3	4	25000	100000	0.557292	2.666667

Try 2

Runtime 2.23e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	4	25000	100000	0.744792	0.744792
1	4	25000	100000	0.713542	1.458333
2	4	25000	100000	0.651042	2.109375
3	4	25000	100000	0.557292	2.666667

Try 3

Runtime 1.84e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	4	25000	100000	0.744792	0.744792
1	4	25000	100000	0.713542	1.458333
2	4	25000	100000	0.651042	2.109375
3	4	25000	100000	0.557292	2.666667

Try 4

Runtime 2.03e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	4	25000	100000	0.744792	0.744792
1	4	25000	100000	0.713542	1.458333
2	4	25000	100000	0.651042	2.109375
3	4	25000	100000	0.557292	2.666667

Try 5

Runtime 2.30e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	4	25000	100000	0.744792	0.744792
1	4	25000	100000	0.713542	1.458333
2	4	25000	100000	0.651042	2.109375
3	4	25000	100000	0.557292	2.666667

4 Cores CPU - Size Problem 200000

Try 1

Runtime 3.88e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	4	50000	200000	0.744792	0.744792
1	4	50000	200000	0.713542	1.458333
2	4	50000	200000	0.651042	2.109375
3	4	50000	200000	0.557292	2.666667

Try 2

Runtime 2.85e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	4	50000	200000	0.744792	0.744792
1	4	50000	200000	0.713542	1.458333
2	4	50000	200000	0.651042	2.109375
3	4	50000	200000	0.557292	2.666667

Try 3

Runtime 3.23e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	4	50000	200000	0.744792	0.744792
1	4	50000	200000	0.713542	1.458333
2	4	50000	200000	0.651042	2.109375
3	4	50000	200000	0.557292	2.666667

Try 4

Runtime 5.41e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	4	50000	200000	0.744792	0.744792
1	4	50000	200000	0.713542	1.458333
2	4	50000	200000	0.651042	2.109375
3	4	50000	200000	0.557292	2.666667

Try 5

Runtime 5.11e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	4	50000	200000	0.744792	0.744792
1	4	50000	200000	0.713542	1.458333
2	4	50000	200000	0.651042	2.109375
3	4	50000	200000	0.557292	2.666667

6 Cores CPU - Size Problem 100000

Try 1

Runtime 2.98e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	6	16666	100000	0.498437	0.498437
1	6	16666	100000	0.489179	0.987616
2	6	16666	100000	0.470663	1.458278
3	6	16666	100000	0.442888	1.901166
4	6	16666	100000	0.405855	2.307022
5	6	16666	100000	0.359565	2.666587

Try 2

Runtime 1.35e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	6	16666	100000	0.498437	0.498437
1	6	16666	100000	0.489179	0.987616
2	6	16666	100000	0.470663	1.458278

3	6	16666	100000	0.442888	1.901166
4	6	16666	100000	0.405855	2.307022
5	6	16666	100000	0.359565	2.666587

Try 3

Runtime 3.04e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	6	16666	100000	0.498437	0.498437
1	6	16666	100000	0.489179	0.987616
2	6	16666	100000	0.470663	1.458278
3	6	16666	100000	0.442888	1.901166
4	6	16666	100000	0.405855	2.307022
5	6	16666	100000	0.359565	2.666587

Try 4

Runtime 2.32e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	6	16666	100000	0.498437	0.498437
1	6	16666	100000	0.489179	0.987616
2	6	16666	100000	0.470663	1.458278
3	6	16666	100000	0.442888	1.901166
4	6	16666	100000	0.405855	2.307022
5	6	16666	100000	0.359565	2.666587

Try 5

Runtime 2.61e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	6	16666	100000	0.498437	0.498437
1	6	16666	100000	0.489179	0.987616
2	6	16666	100000	0.470663	1.458278
3	6	16666	100000	0.442888	1.901166
4	6	16666	100000	0.405855	2.307022
5	6	16666	100000	0.359565	2.666587

6 Cores CPU - Size Problem 200000

Try 1

Runtime 2.58e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	6	33333	200000	0.498452	0.498452
1	6	33333	200000	0.489193	0.987645
2	6	33333	200000	0.470675	1.458320
3	6	33333	200000	0.442898	1.901218
4	6	33333	200000	0.405862	2.307080
5	6	33333	200000	0.359567	2.666647

Try 2

Runtime 2.67e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	6	33333	200000	0.498452	0.498452
1	6	33333	200000	0.489193	0.987645
2	6	33333	200000	0.470675	1.458320
3	6	33333	200000	0.442898	1.901218
4	6	33333	200000	0.405862	2.307080
5	6	33333	200000	0.359567	2.666647

Try 3

Runtime 3.04e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	6	33333	200000	0.498452	0.498452

1	6	33333	200000	0.489193	0.987645
2	6	33333	200000	0.470675	1.458320
3	6	33333	200000	0.442898	1.901218
4	6	33333	200000	0.405862	2.307080
5	6	33333	200000	0.359567	2.666647

Try 4

Runtime 3.55e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	6	33333	200000	0.498452	0.498452
1	6	33333	200000	0.489193	0.987645
2	6	33333	200000	0.470675	1.458320
3	6	33333	200000	0.442898	1.901218
4	6	33333	200000	0.405862	2.307080
5	6	33333	200000	0.359567	2.666647

Try 5

Runtime 3.60e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	6	33333	200000	0.498452	0.498452
1	6	33333	200000	0.489193	0.987645
2	6	33333	200000	0.470675	1.458320
3	6	33333	200000	0.442898	1.901218
4	6	33333	200000	0.405862	2.307080
5	6	33333	200000	0.359567	2.666647

8 Cores CPU - Size Problem 100000

Try 1

Runtime 1.51e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	8	12500	100000	0.374349	0.374349
1	8	12500	100000	0.370443	0.744792
2	8	12500	100000	0.362630	1.107422
3	8	12500	100000	0.350911	1.458333
4	8	12500	100000	0.335286	1.793620
5	8	12500	100000	0.315755	2.109375
6	8	12500	100000	0.292318	2.401693
7	8	12500	100000	0.264974	2.666667

Try 2

Runtime 3.02e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	8	12500	100000	0.374349	0.374349
1	8	12500	100000	0.370443	0.744792
2	8	12500	100000	0.362630	1.107422
3	8	12500	100000	0.350911	1.458333
4	8	12500	100000	0.335286	1.793620
5	8	12500	100000	0.315755	2.109375
6	8	12500	100000	0.292318	2.401693
7	8	12500	100000	0.264974	2.666667

Try 3

Runtime 1.94e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	8	12500	100000	0.374349	0.374349
1	8	12500	100000	0.370443	0.744792
2	8	12500	100000	0.362630	1.107422
3	8	12500	100000	0.350911	1.458333
4	8	12500	100000	0.335286	1.793620
5	8	12500	100000	0.315755	2.109375
6	8	12500	100000	0.292318	2.401693

7	8	12500	100000	0.264974	2.666667
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Try 4

Runtime 1.16e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	8	12500	100000	0.374349	0.374349
1	8	12500	100000	0.370443	0.744792
2	8	12500	100000	0.362630	1.107422
3	8	12500	100000	0.350911	1.458333
4	8	12500	100000	0.335286	1.793620
5	8	12500	100000	0.315755	2.109375
6	8	12500	100000	0.292318	2.401693
7	8	12500	100000	0.264974	2.666667

Try 5

Runtime 2.46e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	8	12500	100000	0.374349	0.374349
1	8	12500	100000	0.370443	0.744792
2	8	12500	100000	0.362630	1.107422
3	8	12500	100000	0.350911	1.458333
4	8	12500	100000	0.335286	1.793620
5	8	12500	100000	0.315755	2.109375
6	8	12500	100000	0.292318	2.401693
7	8	12500	100000	0.264974	2.666667

8 Cores CPU - Size Problem 200000

Try 1

Runtime 1.78e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	8	25000	200000	0.374349	0.374349
1	8	25000	200000	0.370443	0.744792
2	8	25000	200000	0.362630	1.107422
3	8	25000	200000	0.350911	1.458333
4	8	25000	200000	0.335286	1.793620
5	8	25000	200000	0.315755	2.109375
6	8	25000	200000	0.292318	2.401693
7	8	25000	200000	0.264974	2.666667

Try 2

Runtime 1.64e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	8	25000	200000	0.374349	0.374349
1	8	25000	200000	0.370443	0.744792
2	8	25000	200000	0.362630	1.107422
3	8	25000	200000	0.350911	1.458333
4	8	25000	200000	0.335286	1.793620
5	8	25000	200000	0.315755	2.109375
6	8	25000	200000	0.292318	2.401693
7	8	25000	200000	0.264974	2.666667

Try 3

Runtime 3.42e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	8	25000	200000	0.374349	0.374349
1	8	25000	200000	0.370443	0.744792
2	8	25000	200000	0.362630	1.107422
3	8	25000	200000	0.350911	1.458333
4	8	25000	200000	0.335286	1.793620
5	8	25000	200000	0.315755	2.109375
6	8	25000	200000	0.292318	2.401693

7	8	25000	200000	0.264974	2.666667
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Try 4

Runtime 4.81e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	8	25000	200000	0.374349	0.374349
1	8	25000	200000	0.370443	0.744792
2	8	25000	200000	0.362630	1.107422
3	8	25000	200000	0.350911	1.458333
4	8	25000	200000	0.335286	1.793620
5	8	25000	200000	0.315755	2.109375
6	8	25000	200000	0.292318	2.401693
7	8	25000	200000	0.264974	2.666667

Try 5

Runtime 3.16e-04 [s]

Process	Total	problemSize	Total	Local	Total
0	8	25000	200000	0.374349	0.374349
1	8	25000	200000	0.370443	0.744792
2	8	25000	200000	0.362630	1.107422
3	8	25000	200000	0.350911	1.458333
4	8	25000	200000	0.335286	1.793620
5	8	25000	200000	0.315755	2.109375
6	8	25000	200000	0.292318	2.401693
7	8	25000	200000	0.264974	2.666667
