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

 2 100000        6.96e-04 4.05e-04 1.14e-03 7.51e-04 1.17e-03
 2 200000        2.31e-03 1.58e-03 1.69e-03 1.91e-03 8.93e-04
 4 100000        5.67e-04 5.09e-04 8.04e-04 7.59e-04 4.62e-04
 4 200000        1.52e-03 1.28e-03 9.49e-04 1.68e-03 1.58e-03
 6 100000        7.75e-04 7.97e-04 6.30e-04 8.76e-04 5.92e-04
 6 200000        1.63e-03 1.70e-03 1.59e-03 1.49e-03 1.37e-03
 8 100000        1.05e-03 4.45e-04 7.29e-04 1.00e-03 5.25e-04
 8 200000        1.45e-03 1.50e-03 1.66e-03 1.09e-03 1.17e-03
```

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

 2 100000        3.31e-04 3.84e-04 4.06e-04 3.66e-04 2.94e-04
 2 200000        7.95e-04 5.75e-04 6.08e-04 5.80e-04 7.98e-04
 4 100000        3.06e-04 1.91e-04 3.32e-04 3.52e-04 2.62e-04
 4 200000        5.31e-04 4.03e-04 3.50e-04 2.63e-04 3.28e-04
 6 100000        3.75e-04 1.23e-04 3.00e-04 3.10e-04 3.43e-04
 6 200000        3.14e-04 2.01e-04 2.93e-04 4.31e-04 3.20e-04
 8 100000        1.82e-04 1.15e-04 2.97e-04 2.77e-04 2.12e-04
 8 200000        4.83e-04 1.87e-04 3.06e-04 2.55e-04 3.68e-04
```

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

 2 100000        3.31e-04 3.84e-04 4.06e-04 3.66e-04 2.94e-04
 2 200000        7.95e-04 5.75e-04 6.08e-04 5.80e-04 7.98e-04
```

```
/*
 * CPU Report
 */

 /* CPU */

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

 /* Calculation Reports */

 2 Cores CPU - Size Problem 100000

  Try 1

    Runtime 3.31e-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 3.84e-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 4.06e-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 3.66e-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 2.94e-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 7.95e-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 5.75e-04 [s]

    Process        Total  problemSize        Total        Local        Total
```

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 6.08e-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 5.80e-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 7.98e-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 3.06e-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 1.91e-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 3.32e-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 3.52e-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 2.62e-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 5.31e-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 4.03e-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 3.50e-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 2.63e-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 3.28e-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 3.75e-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

Process	Total	problemSize	Total	Local	Total
5	6	16666	100000	0.359565	2.666587

Try 2

Runtime 1.23e-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 3.00e-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 3.10e-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 3.43e-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 3.14e-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 2.01e-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

Process	Total	problemSize	Total	Local	Total
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 2.93e-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 4.31e-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 3.20e-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 1.82e-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 1.15e-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 2.97e-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 4

       Runtime 2.77e-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 2.12e-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 4.83e-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 1.87e-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 3.06e-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 4

   Runtime 2.55e-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 3.68e-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
------------------------------------------------------------------------------
```