Activity 3. Measuring execution times

In 292 471 154 years

It means that the the two calls are so close in time that is practically instantaneous

We get a reliable time from: SIZE=7000000 TIME=57 milliseconds SUM=47327

Activity 5. Taking small execution times (<50 ms)

Original version: SIZE=156250 TIME=11 milliseconds SUM=-2401 NTIMES=5

When the problem size is multiplied by 2, the size reaches around four times of the original size

SIZE=655360 TIME=27 milliseconds SUM=-20462 NTIMES=5

When the problem size is multiplied by 3, the size reaches more than 3 times of the original size

SIZE=590490 TIME=25 milliseconds SUM=-27459 NTIMES=5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| N | Tsum | Tmaximum | Tmatches1 | Tmatches2 |
| 10000 | 147 | 204 | 1 869 | 245 |
| 20000 | 417 | 489 | 7 369 | 500 |
| 40000 | 742 | 991 | 29 146 | 941 |
| 80000 | 1 267 | 1 923 | 112 274 | 1 996 |
| 160000 | 2 667 | 3 929 | 453 202 | 4 055 |
| 320000 | 4 883 | 7 755 | ----- | 8 254 |
| 640000 | 9 863 | 14 852 | ----- | 15 456 |
| 1280000 | 18 536 | 29 306 | ----- | 31 101 |
| 2560000 | 34 979 | 55 999 | ----- | 56 854 |
| 5120000 | 69 567 | 118 427 | ----- | 113 821 |
| 10240000 | 140 758 | 228 679 | ----- | 458 982 |
| 20480000 | ----- | ----- | ----- | ----- |
| 40960000 | ----- | ----- | ----- | ----- |
| 81920000 | ----- | ----- | ----- | ----- |