Activity 3. Measuring execution times

In 292 471 154 years

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 (100) | Tmaximum (100) | Tmatches1 (10) | Tmatches2 |
| 10000 |  | 9 | 686 |  |
| 20000 |  | 18 | 2684 |  |
| 40000 |  | 36 | 10779 |  |
| 80000 |  | 69 | 43189 |  |
| 160000 |  | 140 |  |  |
| 320000 |  | 276 |  |  |
| 640000 |  | 580 |  |  |
| 1280000 |  | 1121 |  |  |
| 2560000 |  | 2257 |  |  |
| 5120000 |  | 4562 |  |  |
| 10240000 |  | 9033 |  |  |
| 20480000 |  | 20068 |  |  |
| 40960000 |  | 40265 |  |  |
| 81920000 |  | 75973 |  |  |