Activity 2. Some iterative models

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| N | tLoop1 (10000) | tLoop2 (1000) | tLoop3 (100) | tLoop4 (100) |
| 100 | 99 | 332 | 1,23 | 1,22 |
| 200 | 204 | 1 520 | 4,99 | 8,97 |
| 400 | 435 | 6 030 | 22,26 | 70,18 |
| 800 | 1 061 | 29 230 | 94,39 | 557,89 |
| 1600 | 2 997 | OoT | 437,45 | OoT |
| 3200 | 5 002 | OoT | OoT | OoT |
| 6400 | 10 283 | OoT | OoT | OoT |
| 12800 | 28 690 | OoT | OoT | OoT |
| 25600 | OoT | OoT | OoT | OoT |
| 51200 | OoT | OoT | OoT | OoT |

Activity 3. Creation of iterative models of a given time complexity

|  |  |  |  |
| --- | --- | --- | --- |
| N | tLoop5 | tLoop6 (100) | tLoop7 (10) |
| 100 | 174 | 116 | 327 |
| 200 | 544 | 700 | 4 664 |
| 400 | 1 708 | 5 439 | OoT |
| 800 | 6 504 | 41 330 | OoT |
| 1600 | 25 360 | OoT | OoT |
| 3200 | OoT | OoT | OoT |
| 6400 | OoT | OoT | OoT |

Original

Activity 4. Comparison of two algorithms

|  |  |  |  |
| --- | --- | --- | --- |
| N | tLoop1 (10000) | tLoop2 (1000) | t1/t2 |
| 100 | 0,0099 | 0,332 | 0,0298 |
| 200 | 0,0204 | 1,520 | 0,0134 |
| 400 | 0,0435 | 6,030 | 0,0072 |
| 800 | 0,1061 | 29,230 | 0,0036 |
| 1600 | 0,2997 | OoT | OoT |
| 3200 | 0,5002 | OoT | OoT |
| 6400 | 1,0283 | OoT | OoT |
| 12800 | 2,8690 | OoT | OoT |
| 25600 | OoT | OoT | OoT |
| 51200 | OoT | OoT | OoT |

|  |  |  |  |
| --- | --- | --- | --- |
| N | tLoop3 (100) | tLoop2 (1000) | t3/t2 |
| 100 | 1,23 | 0,332 | 3,7048 |
| 200 | 4,99 | 1,520 | 3,2829 |
| 400 | 22,26 | 6,030 | 3,6915 |
| 800 | 94,39 | 29,230 | 3,2292 |
| 1600 | 437,45 | OoT | OoT |
| 3200 | OoT | OoT | OoT |
| 6400 | OoT | OoT | OoT |
| 12800 | OoT | OoT | OoT |
| 25600 | OoT | OoT | OoT |
| 51200 | OoT | OoT | OoT |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| N | tloop4 python | tloop4 java no | tloop4 java yes | no/python | yes/no |
| 200 | 6,148 | 8,97 | 0,1038 | 1,459 | 0,1157 |
| 400 | 53,473 | 70,18 | 0,6453 | 1,3124 | 0,0092 |
| 800 | 458,983 | 557,89 | 4,4478 | 1,2136 | 0.0080 |
| 1600 | OoT | OoT | 26,0689 | OoT | OoT |
| 3200 | OoT | OoT | OoT | OoT | OoT |
| 6400 | OoT | OoT | OoT | OoT | OoT |