Activity 1. [Iterative Models]

Table 1. In milliseconds and without optimization.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| N | tLoop1 | tLoop2 | tLoop3 | tLoop4 |
| 100 | 46\*10^-6 | 48\*10^-4 | 334\*10^-4 | 190\*10^-4 |
| 200 | 82\*10^-6 | 160\*10^-4 | 1411\*10^-4 | 885\*10^-4 |
| 400 | 139\*10^-6 | 729\*10^-4 | 60\*10^-2 | 4400\*10^-4 |
| 800 | 196\*10^-6 | 332\*10^-3 | 267\*10^-2 | 262\*10^-2 |
| 1600 | 374\*10^-6 | 106\*10^-2 | 1278\*10^-2 | 1879\*10^-2 |
| 3200 | 684\*10^-6 | 437\*10^-2 | 5182\*10^-2 | 126 |
| 6400 | 140\*10^-5 | 1612\*10^-2 | 225 | 836 |
| 12800 | 279\*10^-5 | 6977\*10^-2 | 973 | 5902 |
| 25600 | 557\*10^-5 | 302 | 4055 | 43585 |
| 51200 | 110\*10^-4 | 1197 | 20690 | OoT |

For Loop1 it has a complexity of O(n\*log(n)), but the times increase by 2 all the time.

For Loop2 it has a complexity of O(n^2\*log(n)), but the time increase by 4 in O(n).

Activity 2. [TITLE OF THE ACTIVITY]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| N | tLoop1 | tLoop2 | tLoop3 | tLoop4 |
| 100 | 46\*10^-6 |  |  |  |
| 200 | 82\*10^-6 |  |  |  |
| 400 | 139\*10^-6 |  |  |  |
| 800 | 196\*10^-6 |  |  |  |
| 1600 | 374\*10^-6 |  |  |  |
| 3200 | 684\*10^-6 |  |  |  |
| 6400 | 140\*10^-5 |  |  |  |