Activity 1. [Problem Size]

|  |  |
| --- | --- |
| **n** | **time(ms)** |
| 10000 | 4491 |
| 20000 | 18097 |
| 40000 | OoT |
| 80000 | OoT |
| 16000 | OoT |
| 32000 | OoT |

Activity 2. [computer performance]

CPU1: 12th Gen Intel(R) Core(TM) i5-12400 2.50 GHz

RAM1: 16,0 GB

CPU2: Intel(R) Core(TM) i5-8250U CPU @ 1.60GHz

RAM2: 16,0 GB

|  |  |
| --- | --- |
| PYTHON1 | |
| **n** | **time(ms)** |
| 10000 | 4491 |
| 20000 | 18097 |
| 40000 | OoT |
| 80000 | OoT |
| 16000 | OoT |
| 32000 | OoT |

|  |  |
| --- | --- |
| PYTHON2 | |
| **n** | **time(ms)** |
| 10000 | 3345 |
| 20000 | 15636 |
| 40000 | OoT |
| 80000 | OoT |
| 16000 | OoT |
| 32000 | OoT |

Activity 3. [implementation environment]

|  |  |
| --- | --- |
| JAVA1 | |
| **n** | **time(ms)** |
| 10000 | 73 |
| 20000 | 290 |
| 40000 | 1107 |
| 80000 | 4501 |
| 16000 | 17838 |
| 32000 | OoT |

|  |  |
| --- | --- |
| PYTHON1 | |
| **n** | **time(ms)** |
| 10000 | 4491 |
| 20000 | 18097 |
| 40000 | OoT |
| 80000 | OoT |
| 16000 | OoT |
| 32000 | OoT |

Activity 4. [algorithm that is used]

|  |  |
| --- | --- |
| PYTHON2 | |
| **n** | **time(ms)** |
| 10000 | 395 |
| 20000 | 1709 |
| 40000 | 6761 |
| 80000 | 26471 |
| 16000 | OoT |
| 32000 | OoT |
|  |  |

|  |  |
| --- | --- |
| PYTHON1 | |
| **n** | **time(ms)** |
| 10000 | 3345 |
| 20000 | 15636 |
| 40000 | OoT |
| 80000 | OoT |
| 16000 | OoT |
| 32000 | OoT |
| PYTHON3 | |
| **n** | **time(ms)** |
| 10000 | 193 |
| 20000 | 706 |
| 40000 | 2881 |
| 80000 | 13049 |
| 16000 | 58530 |
| 32000 | OoT |
|  |  |