Activity 1. Table made “manually”

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1/t | 2/t | 3/t | 4/t | 5/t | 6/t | 7/t | 8/t | 9/t | 10/t | 11/t | 12/t | 13/t | 14/t |
| 1/f | 2/f | 1/t | 2/t | 3/t | 2/t | 3/t | 4/t | 3/t | 4/t | 5/t | 4/t | 5/t | 6/t |
| 1/f | 2/f | 1/f | 2/f | 3/f | 1/t | 2/t | 3/t | 2/t | 37T | 4/T | 2/t | 3/t | **4/t** |

Activity 2. ExchangeTimes

|  |  |
| --- | --- |
| n | time |
| 40000 | 5 |
| 80000 | 10 |
| 160000 | 10 |
| 320000 | 44 |
| 640000 | 42 |
| 1280000 | 119 |
| 2560000 | 168 |
| 5120000 | 553 |
| 10240000 | 3098 |
| 20480000 | 10150 |

The complexity of this algorithm is quadratic, can be seen by taking a look at the method and seeing that the biggest complexity is given by the two chained for loops.