**Lab 3- Documentation Tătar Flavia-Andreea, 937**

*Different running scenarios:*

1. **Create an actual thread for each task**
   1. **The number of tasks/threads is: 4, size of matrix: 500x500**

First division: The time passed is: 1996 milliseconds

Second division: The time passed is: 1996 milliseconds

Third division: The time passed is: 1996 milliseconds

* 1. **The number of tasks/threads is: 30, Size of matrix: 500x500**

First division: The time passed is: 4972 milliseconds

Second division: The time passed is: 4972 milliseconds

Third division: The time passed is: 4972 milliseconds

* 1. **The number of tasks/threads is: 100, size of matrix: 500x500**

First division: The time passed is: 2488 milliseconds

Second division: The time passed is: 2488 milliseconds

Third division: The time passed is: 2488 milliseconds

* 1. **The number of tasks/threads is: 100, size of matrix: 250x250**

First division: The time passed is: 2837 milliseconds

Second division: The time passed is: 2837 milliseconds

Third division: The time passed is: 2837 milliseconds

* 1. **The number of tasks/threads is: 250, size of matrix: 250x250**

First division: The time passed is: 2795 milliseconds

Second division: The time passed is: 2795 milliseconds

Third division: The time passed is: 2795 milliseconds

1. **Use a thread pool**
   1. **The number of tasks is: 4, number of threads:4, size of matrix: 500x500**

First division: The time passed is: 1483 milliseconds

Second division: The time passed is: 1483 milliseconds

Third division: The time passed is: 1483 milliseconds

* 1. **The number of tasks is: 30, number of threads is:10, size of matrix: 500x500**

First division: The time passed is: 1658 milliseconds

Second division: The time passed is: 1658 milliseconds

Third division: The time passed is: 1658 milliseconds

* 1. **The number of tasks is: 100, number of threads is:50, size of matrix: 500x500**

First division: The time passed is: 1702 milliseconds

Second division: The time passed is: 1702 milliseconds

Third division: The time passed is: 1702 milliseconds

* 1. **The number of tasks is: 100, number of threads is:80, size of matrix: 250x250**

First division: The time passed is: 1999 milliseconds

Second division: The time passed is: 1999 milliseconds

Third division: The time passed is: 1999 milliseconds

* 1. **The number of tasks is: 250, number of threads is:200, size of matrix: 250x250**

First division: The time passed is: 2030 milliseconds

Second division: The time passed is: 2030 milliseconds

Third division: The time passed is: 2030 milliseconds

*Hardware platform*

Processor: Intel core i5 @1.60 GHz 1.80 Ghz

Available RAM: 7,88 GB

Operating system and processor x64 bit (Windows 10 Education)