Assignment 2 wants us to develop a multithreaded app code that takes the range of 1 to 10,000 and give the result of the number with the largest number of divisors. The goal is to make the program run the fastest. We use 20 as the number of threads as the most efficient because my computer’s specs can run quite fast. The result shows:

Text

Description automatically generated

The following question for this assignment is:

1. When you run the program with just one thread you get 66 ms. A picture containing text

   Description automatically generated
2. My computer can run 25 threads at a pace of 20-21 milliseconds. After that, it starts to get slower to finish the program.
3. In a window’s Machine, a thread reserve has a size of 1MB. My computer has a total of 16 cores. Which means I can have about max 32 threads.
4. This uses data parallelization because it’s creating and using multiple threads at once.