**Lab 1:**

Part 1:

Browser: Chrome 140.0.7339.80

CPU: Intel Core I7 – 1165G7 @ 2.8 GHz

Cache: L1 320 KB, L2 5 MB, L3 12 MB

RAM: 16 GB

OS: Windows 11 Home

Ex.1.3B:

|  |  |
| --- | --- |
| Median Access Latency | Number of Cache Lines |
| 0 | 1 |
| 0 | 10 |
| 0 | 100 |
| 0.1 | 1000 |
| 0.5 | 10000 |
| 0.5 | 100000 |
| 4.4 | 1000000 |
| 15.4 | 10000000 |

Discussion:

As we can see, for js timer, we need to read at least 1000 lines

Q2.1 + 2.2:  
A screenshot of a computer screen

AI-generated content may be incorrect.

We worked with trace size of 100. ( K = 100)

And N = 196,608 cache lines

The first trace is from youtube, we can see a lot of purple and pink, so the website access the cache frequently and our code have a small number of cycles. The second trace is of Wikipedia, there is a dominant orange, so our code runs more cycles on the cache now. And the last trace is of game site, there is a dominant purple, so the site takes most of the cache and our code has the minimum cycles from all the traces.

Q2.4:  
A black screen with white text

AI-generated content may be incorrect.