GPGPU programming lab1 (part 3 report)

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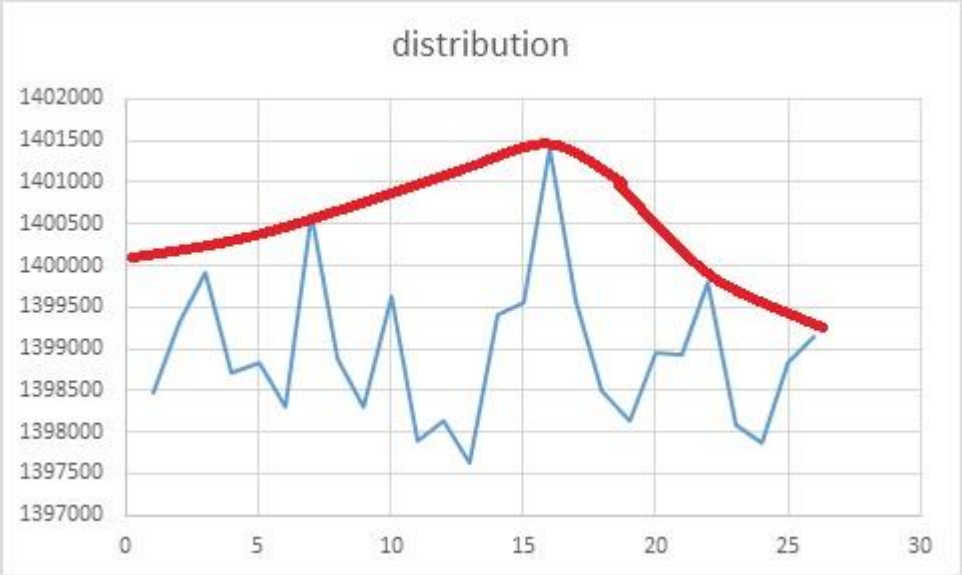
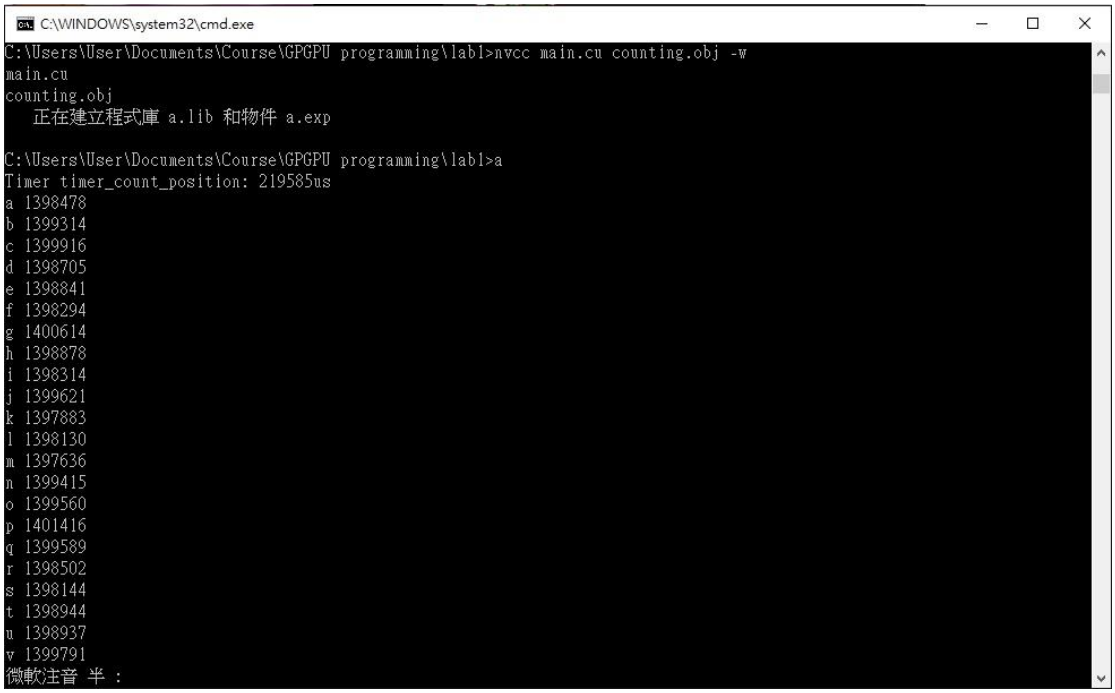
Subject: Inspect the distribution of the Poisson distribution by counting the letter frequency of the random generate input text

Approach:
Counting each letter and accumulate the frequency in the counting buffer, and print the result.



The above graph shows the result letter count of the 40MB data that is randomly input which shows the roughly Poisson distribution tendency.



The above picture shows the result of the execution of my code

Discussion:

By doing this experiment, we can find that the STL implementation of Poisson distribution is a well-designed function, which has relatively high reliability.

And during the process of experiment, I also learned a great way to generating random input, which is helpful in the future work.