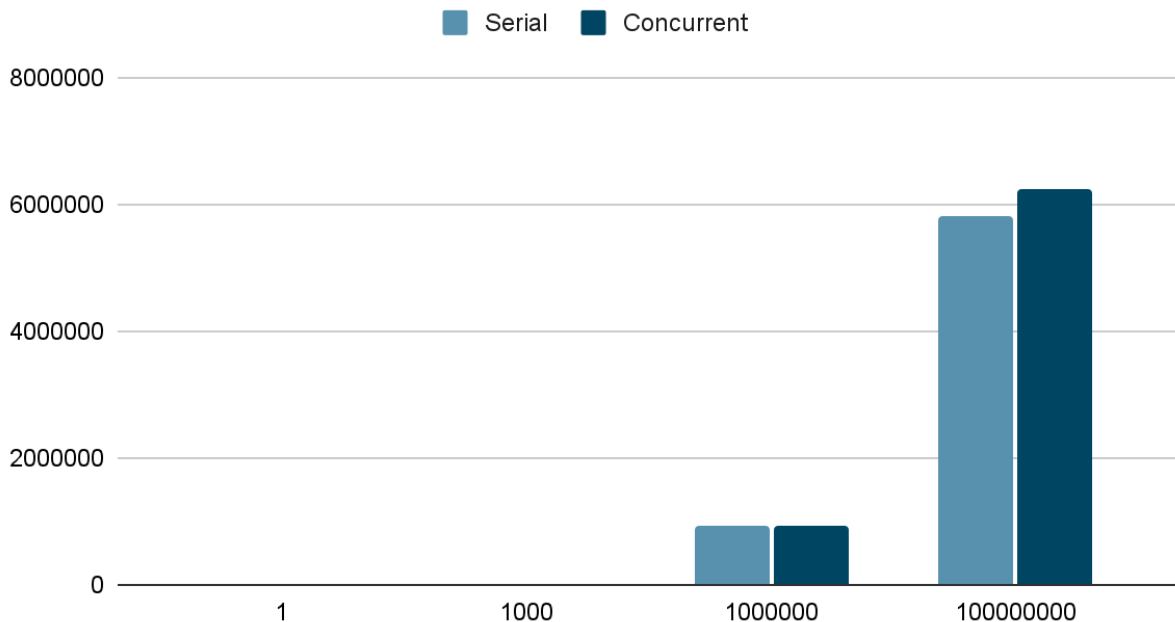


## Points scored



Q1. For the data from the serial experiment, how was the effective bandwidth affected by the size of numBytes?

The effective bandwidth increase with the numBytes

Q2. Using the data from only the **Serial** experiment, estimate the bandwidth between your client and your server. Now incorporate the data from your **Latency** experiment to increase the accuracy of your bandwidth estimate. Describe how data from the **Latency** experiment improves accuracy.

10 mbps

For 1 mb object. It usually take 1.03s. The latency is 123ms.  $1.03 - 123 = 0.91s$  it can improve the accuracy a little bit.

Q3. How did the data from the **Serial** experiment compare from the **Concurrent** experiment? Similar? Dissimilar? Explain these results as best you can.

The fetchall program send request serially. Therefore, it will have a similar result.

Q4. After carrying out these experiments, what is something that you learned about performance and networked applications?

The request speed for small objects also relies heavily on the website's program runtime.

Q5. After carrying out these experiments, what is one (or more) unanswered question(s) you still have about network performance?

I test with 1gb input it always says out of memory.