Preface: Transactions on the XRP Ledger are communicated and recorded by a network of computers running a software daemon called "rippled." Every few seconds, the network reaches consensus on a new set of transactions which are applied to the old state of the ledger to create a new “validated ledger” that gets broadcast across the network. You can use rippled's `server_info` command to gather information about the set of validated ledgers that this rippled has received.

Task Summary: Write a script/program that periodically calls rippled’s `server_info` command and records the sequence number of the latest *validated ledger* along with the current time. Record this data in a file. Then, use this data to construct a plot (time on the x-axis, sequence number on the y-axis) that visualizes how frequently the ledger sequence is incremented over time (i.e. how often new ledgers are validated). Choose a time span and polling interval that can effectively capture and depict this information.

In a few paragraphs, describe your process and results:

- How does your script work?
- How did you decide on your polling interval?
- What do the results tell you?
- What might explain the variation in time between new ledgers? (this description of the consensus algorithm may help you: https://developers.ripple.com/consensus-principles-and-rules.html)

Bonus question #1: Enhance your script to calculate the min, max, and average time that it took for a new ledger to be validated during the span of time captured.

Bonus question #2: There are some other (better) ways that you could use the rippled API to find how long each ledger took to close/validate. Using the API documentation, find and describe one of these methods (you don’t need to actually implement it).

Notes

- Use s1.ripple.com:51234 as your target rippled server
- A description of the server_info command can be found here: https://developers.ripple.com/server_info.html
- You can use any plotting software, but we recommend gnuplot. See this page for examples of how to get started: https://alvinalexander.com/technology/gnuplot-charts-graphs-examples
- Feel free to get creative. Any additional insights which demonstrate your coding skills or general knowledge are more than welcome!