SOEN 345 - Software Testing, Verification, and Quality Assurance
Assignment 5

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Question 1

a) First let's take a look at the 10 lowest latencies for each website:

```
- List of 10 lower latencies for Concordia:
53    81
15    85
54    87
61    90
93    91
94    92
55    92
96    93
6     93
52    93


- List of 10 lower latencies for Amazon:
0     258
1     281
9     309
25    350
52    362
8     382
71    389
11    394
85    411
38    420
```

Values for Amazon are way higher than those for Concordia. This is confirmed when we take a look at the average latency for each. While requests to `concordia.ca` have an average latency of 110.71ms, those to `amazon.ca` have an average latency of 651.37ms.
Since we know there is significantly more successful requests to `concordia.ca`, we want to know if it has an impact on the fact that requests to `amazon.ca` have such a higher latency in average. We find out that successful requests to `amazon.ca` have an average latency of 677.48ms.

b) 100 requests are sent for both websites.

c) Requests to `concordia.ca` were all successfully processed. However, for `amazon.ca` only 62 of the 100 requests were successfully processed.

d) There are significant differences between results of requests sent to `concordia.ca` compared to those sent to `amazon.ca` both in latency and in success rate. This can be due to the fact that `amazon.ca` protects itself from attacks and hence tend to block requests issued by simulated users. If not, it would be possible to conduct attacks against websites and make them eventually crash if more requests than servers can handle are made.

Question 2

a) BlazeMeter allows to seamlessly build complex, scalable, and flexible tests by allowing the user to choose among a wide variety of tests. The way it is used directly from within the browser reminds of Selenium IDE. Tests are easily exportable to `.jmx` format and can be used with JMeter for further modification, for example, modify test scale.

Test plan script for Part B as well as aggregate report file are joined with this submission as `Part_B.jmx`, `partB_aggregate.csv` respectively.

Question 3

Test plan script for Part C, result file, and a screenshot of the execution of JMeter in CLI mode are joined with this submission as `Part_C.jmx`, `part_c_results.jtl`, and `JMeterExecutionCLIMode.png` respectively.

Execution of JMeter in CLI mode.