**System Parameters:**

|  |  |
| --- | --- |
| CPU Speed | 2.3 GHz |
| Number of Cores | 4 |
| RAM | 16GB |
| Disk | 500GB SSD |
| Number of users | 50 |
| Number of tweets per user | Assigned randomly (probably 20,000) |
| Followers per user | 10 |

**Performance Results:**

|  |  |
| --- | --- |
| Number of tweets inserted / second | 4638 |
| Number of home timelines viewed / second | 0.55 |

**Implications of system parameters:**

My machine is well equipped to handle this program and my database parameters are fairly standard. I achieved decent results for tweet insertion but was very off on home timeline viewing. This is more likely attributable to my program design, though, than capacity of the database. As the database filled up with records, it appeared that performance decreased. Attempting to generate 1 billion tweets, therefore, with a relational database would likely be a bad idea.

**Optimal Performance:**

The size of the CSV file generated was 167 MB. It was written in about 216 seconds, so write speed to the database was approximately .77 MB per second. A typical SSD writes at 600 MB / second, so this is significantly slower than the “optimal performance” of a disk drive.