**Problem 3 – Queue**

**What is my average customer wait time?**

The average wait time is 14.9896 seconds

**What is the max number of customers in the line?**

The maximum number of customers is 11.

**If you randomize servicing and arrival times by +-50% how does this change the results?**

If servicing and arrival is randomized by +- 50% average servicing time significantly goes down almost by half, but the max number of people in line significantly increase.

**How does the static compare to the random?**

Static is constant so there is not much room for change when constantly running a program. It is easy to calculate, so you will always know the statistics. Random however can have the statistics all over the place, you do not know whether or not everything will be worst case scenario or best case scenario so you can have a really good output or really terrible one, but most often the average of multiple simulations is the result.

**Why so different?**

Static is constant, random is unpredictable