Event Driven Simulator Testing

1.

Changing:

Change the total time from 100000000 to 50000000

Expected result:

The total served number should be half of previous number. Other stats should remain almost the same.

Actual result:

The total served number changed from 3124962 to 1562486. Other results are almost same.

Test 1 passed!

2.

Changing:

Double the number of tellers from 10 to 20.

Expected result:

Average serving time should be half of previous value. Variance should be smaller. Idle time should increase.

Total served number should remain almost same.

Actual result:

Average serving time changed from 636 to 315. Variance changed from 140623 to 27381. Idle time increased from 7.30369% to 100%. Total served number should remain almost same.

Test 2 passed!

Changing:

Change the customers' arriving time from every 32 seconds to every 64 seconds.

Expected result:

Average serving time and total served number should be half of previous value.

Variance should be smaller.

Idle time should increase.

Actual result:

Average serving time decreased from 636 to 315. Total served number decreased from 3124962 to 1562496. Variance decreased from 140623 to 27359. Idle time increased from 7.30369% to 99.9986%.

Test 3 passed!

4.

Changing:

Service time range change from [30, 600] to [30, 1200].

Expected result:

Total served number should be half of previous value. Other stats should increase.

Actual result:

Total served number changed from 3124962 to 1562483. Average serving time increased from 636 to 816. Variance increased from 140623 to 180191. Idle time increased from 7.30369% to 20.5938%.

Test 4 passed!