

Problem 1: Able and Baker are two servers at the Sonic Drive-In(service at the speed of sound!). Cars arrive uniformly between (5,10) minutes. The servers serve customers uniformly at the rate of (10,16) minutes. However, Customers prefer able over baker. Draw the simulation controller and the required flow diagrams.

Simulate the system for 10 hours. Estimate Able's and Baker's utilization (percentage of time busy). Obtain the average waiting time for each customer. How many will stay in the waiting line?

Also, repeat the problem for the case where there are no preferences between servers. Compare the results with the previous case. Which approach would be better?