*I pledge my Honor that I have abided by the Stevens Honor System – Joshua Schmidt 2/5/19*

Modeling and Simulation

Homework 2

1. Implement manually a FEL table for the first 4 customers to a queueing system (consider all 4 arrivals) with 1 server. The random inter-arrival times that were previously generated are: 3, 1, 4, 4, and the 4 generated random service times: 2, 5, 3, 2. Consider that arrival events are events of type 1 and departure events are events of type 2.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Clock** | **Arrival**  **Time** | **Departure time** | **System state** | **FEL** |
| t = 0 | 0 | - | (0, 1) | (1, 3)  (2, 2) |
| t = 2 | - | 2 | (0, 0) | (1, 3) |
| t = 3 | 3 | - | (0, 1) | (1, 4)  (2, 8) |
| t = 4 | 4 | - | (1, 1) | (2, 8)  (1, 8) |
| t = 8 | - | 8 | (0, 1) | (1, 8)  (2, 11) |
| t = 8 | 8 | - | (1, 1) | (2, 11)  (1, 12) |
| t = 11 | - | 11 | (0, 1) | (1, 12)  (2, 13) |