Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ NetID\_\_\_\_\_\_\_\_\_\_\_

Use this answer sheet to keep track of your answers to Recitation 6. When you are finished, save it as a pdf and upload it to Gradescope.

*Run the simulator 3 different times and for each simulation record below or in a separate location the value of the mean number of items in the queue (on the SimTrace spreadsheet in cell F4), and the max number of items in queue (on the SimTrace spreadsheet in cell F2).*

|  |  |  |
| --- | --- | --- |
|  | *Mean # of Items in the Queue* | *Max # of Items in the Queue* |
| *Run 1* |  |  |
| *Run 2* |  |  |
| *Run 3* |  |  |

*Use your simulation to calculate the average time in queue for items in the low priority queue, and items in the high priority queue. Take a look at the mean value in the SimTrace sheet of Number of Items in High Priority Queue, and Number of Items in Low Priority Queue. Which one is larger? Which one should be larger based on the way the simulation was designed?*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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*Run your simulation, but change the “Simulate Until Time” in the dialog box that you use to run the simulation from 1000 to 10000. Run it 3 times and write down the numbers that we get for mean number of items in the low priority queue, and mean number of items in the high priority queue.*

|  |  |  |
| --- | --- | --- |
|  | *Mean # of Items in the*  *Low-Priority Queue* | *Mean # of Items in the*  *High-Priority Queue* |
| *Run 1* |  |  |
| *Run 2* |  |  |
| *Run 3* |  |  |

*Does your simulation show that the current system achieves this goal?*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_