DESpy Assignment 1

# Description

For this assignment you will explore the effect of the buffer size on various measures for the TandemQueueWithBlocking model. You will create a Python program that simulates the model for various buffer sizes.

Use the parameters in the following table:

|  |  |
| --- | --- |
| **Parameter** | **Value** |
| inter\_arrival\_time\_generator | Exponential(mean=2.6) |
| service\_time\_generator\_1 | Gamma(alpha=1.4, beta=1.6) |
| service\_time\_generator\_2 | Uniform(min=1.0, max=3.0) |
| buffer | from 1 through 10 |

Your program should run a single replication of length 100,000 time units for each of the buffer sizes. For each buffer size, output:

* (Time-) average number in queue for each queue
* Average utilization for each server
* (Time-) average number blocked

# Deliverable

E-mail your file (only) to: [abuss@nps.edu](mailto:abuss@nps.edu) with the subject line “DESpy Assignment 1”