Project Report

Topic: M/M/K queue simulation

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Problem description:

Simulating Following system scenario :

Customer arrival process : Poisson process
Service time distribution : exponentially distributed
Servers : K servers present in system.
Buffer : you can set buffer size as you want (set 0 for infinite buffer)

Goals of Solution:

1) Throughput of system.
2) Average waiting time of customers in queue.
3) Average system time.

Input-Output formats:

(Inputs are in MACRO format, edit macro in "TopApp.cpp" to change following inputs as per requirement, then recompile and run the program.)

Input:

1) Customer arrival process distribution parameters.
2) Service time distribution parameters.
3) Number of servers in system.

Output:

1) Throughput of system.
2) Average system time.
3) Average waiting time of customers in queue.