Simulation of Single Channel Queuing System

Enter Random Digits

Add +

RD Arrival Time

RD Service Time

RD Arrival Time

RD Service Tim

Submit

Generate Random Values

Distribution of Time Between Arrivals

Time Between Arrivals	Random-Digit Assignment
1	001-125
2	126-250
3	251-375
4	376-500
5	501-625
6	626-750
7	751-875
8	876-000

Service-Time Distribution

Service Time	Random-Digit Assignment
1	1-10
2	11-30
3	31-60
4	61-85
5	86-95
6	96-00

Simulation Table for Single Queueing Problem

Coustomer No	Time Since Last Arrival	Arrival Time	Service Time	Time Service Begins	Customer Waits in Queue	Time Service Ends	Customer Spends in System	Idle Time of Server
1	--	0	4	0	0	4	4	0
2	8	8	5	8	0	13	5	4
3	1	9	4	13	4	17	8	0
4	2	11	2	17	6	19	8	0
5	4	15	4	19	4	23	8	0
Total			19		14		33	4

Avarage Waiting Time

14 / 5 = **2.80**

Probability Wait In Queue

3 / 5 = **0.60**

Probability of Idle Server

4 / 23 = **0.17**

Probability of Server Busy

1 - 0.17 = **0.83**

Average Service Time

19 / 5 = **3.80**

Average Inter Arrival Time

15 / 4 = **3.75**

Avg Wait Time Whom wait

14 / 3 = **4.67**

Avg Time Spends

33 / 5 = **6.60**

Md. Fahim Shahriyear Hossain
162-15-8092

Dewan Md Rashed Khan
162-15-8091