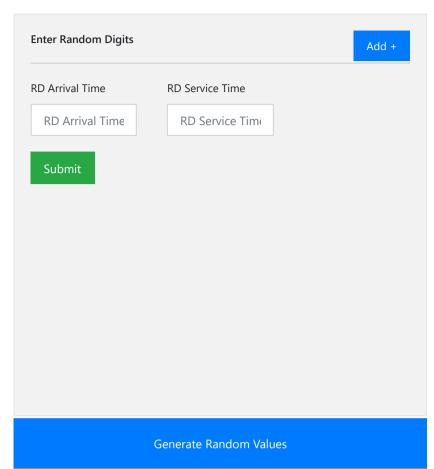
## Simulation of Single Channel Queuing System

**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	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

Average Service Time 19 / 5 = 3.80

Probability Wait In Queue

3 / 5 = **0.60** 

Average Inter Arrival Time

15 / 4 = **3.75** 

Probability of Idle Server

4 / 23 = **0.17** 

Avg Wait Time Whom wait

14 / 3 = **4.67** 

Probability of Server Busy

1 - 0.17 = **0.83** 

Avg Time Spends

33 / 5 = **6.60**