Example:

Consider the Post-office of a small town. There are 5 workers available to stamp the letters. It has been observed that the rate at which a letter arrives for postage follows geometric distribution with parameter 0.3. The workers are able to stamp the letters, correctly with probability 0.7. The workers can stamp atmost 200 letters during the day. Obtain the measures of effectiveness, assuming that the situation is modeled as a $Geo/Geo/5/200$ queue.

Solution:

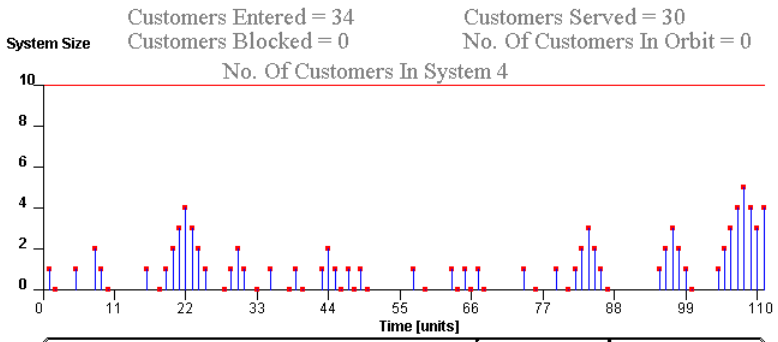
In order to obtain the measures of effectiveness, we follow the steps as shown below:

- Open the page where the experimentation is to be performed
- Feed the data as shown:

- Next, click on the **'Start'** button to obtain the desired measures of effectiveness

Discrete time finite servers - finite capacity model

Customers Entered = 34 Customers Served = 30
Customers Blocked = 0 No. Of Customers In Orbit = 0



Performance Measures	Run Time (till t=111.0)	Steady State (Theoretical)
Mean No. of Customers in the System	1.117	0.428
Mean No. of Customers in Queue	0.0	0.0
Mean Waiting Time In Queue	0.0	0.0
Mean Sojurn Time In System	3.647	1.428
Utilisation	0.223	0.085
Throughput	0.27	0.3
Blocking Probability	0.0	0.0

Start Reset

Arrival Probability (p) : 0.3

Departure Probability (q) : 0.7

Number of Servers : 5

System Capacity : 200

Queueing Discipline :

(•) FIFO ( ) LIFO ( ) Random