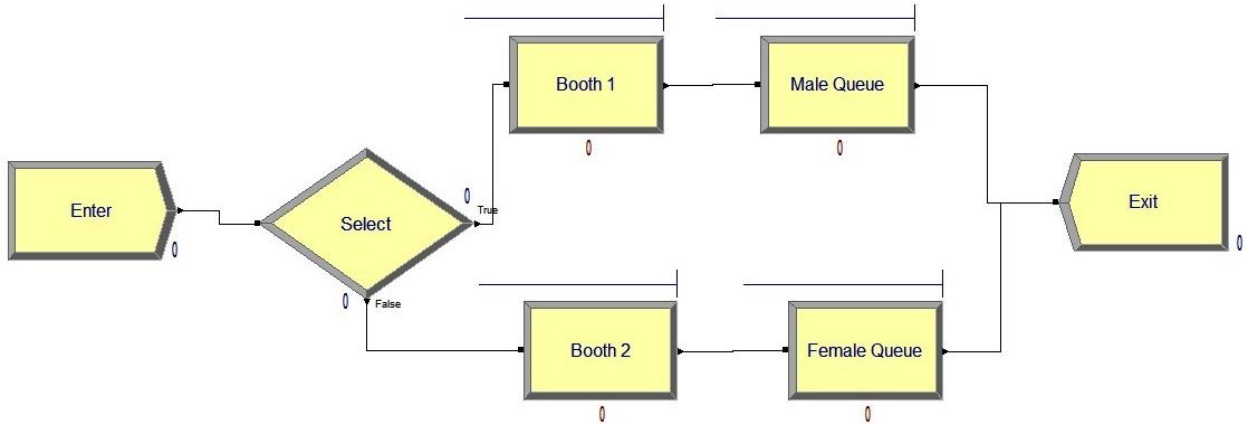
Lab – 4

Problem:

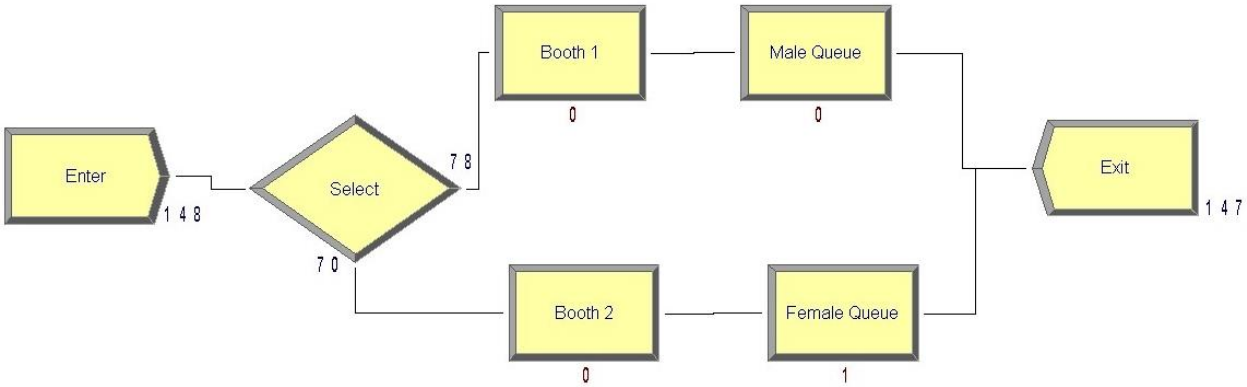
A shop model has two sections with two processes in parallel, one for male and one for female. Customers arrive at a shop with exponentially distributed inter-arrival times of mean 5 minutes. And the customer has to wait in a queue 1-to-3 minutes uniformly. Now when a new customer comes to the booth, he/she select a queue. The chances of a customer being male/female are 50%. After enter in a shop each male customer needs 1 min and each female customer needs 4 min to complete his/her shopping.

We are interested in simulating the system for 15 hours to obtain process utilizations.

Diagram



Before simulation



After simulation