Lab Work-8

Embassy System

Problem:

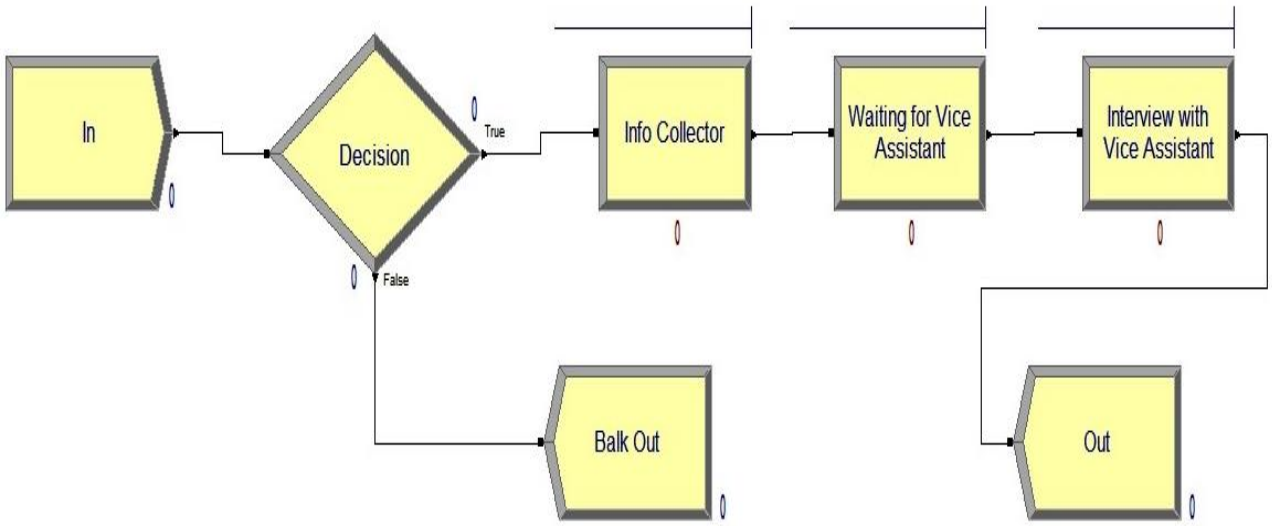
Imagine that it's an embassy. Where, three persons are arrived per hour in an exponential distribution. When a candidate comes to the embassy, at first he/she must register with an information-collector before facing the vise-assistant. In this system there will be only one information-collector on duty with service time initially distributed at 2 hours. After that a candidate could face the vice-assistant for the interview. The vice-assistant will take 20 minute in an exponential distribution to see each candidate. The interview will go on for 2 hours.

Now here is the rule that the system have.

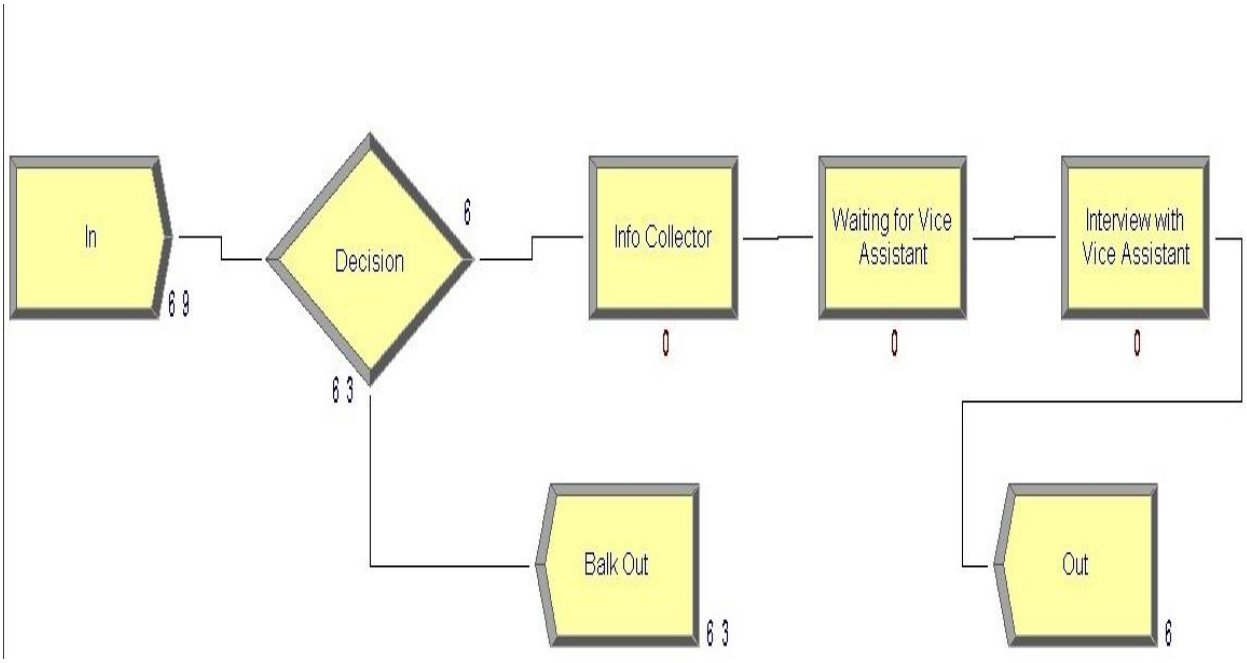
- If there will be more than 6 candidates in the entire system (such that: being register by the information collector, waiting for the vice-assistant, interviewing with the vice-assistant) then candidates will be balk. So here is the problem, now try to simulate it in proper way.

We are interested in simulating the system for 24 hours.

Diagram



Before simulation



After simulation