



System Specification

A quality tester's behaviour is described by the above GSPN.

Assuming, that in each time step, one item is produced, the probability for the item to test OK is 0.9 for source 0 and 0.95 for source 1.

Tasks and Questions

Construct the state space and ERG of the above model

Construct the CTMC representing the GSPNs behaviour

Use your program to answer the following questions:

- What is the throughput of the transition from source 0 to source 1 in steady state for different discretization time steps (e.g. 2, 1, 0.5, 0.25, 0.1)?
- What is the probability of the place *Source 1 Active* being empty in steady state for different discretization time steps (e.g. 2, 1, 0.5, 0.25, 0.1)?
- What is the throughput of source 1 in steady state?