CPN SIMULATOR'S EXECUTION ALGORITHM

1. Construct a list of **enabled transitions.**

2. Scan the list of enabled transitions and select from that list a set of transitions and specific bindings that are not in conflict and hence can fire concurrently. Such a set is called an **occurrence set.**

$$\textbf{Occurrence set} = \Sigma\textbf{(occurrence elements)}$$

$$\textbf{occurrence element} = \textbf{(transition,binding)}$$

Why we use occurrence sets:

- a method of **adjudicating conflicts**

- a help to the simulator to execute the net more efficiently

- to provide a medium through which the observer can control the details of execution so as to study a net in more detail or debug it more efficiently.

3. Fire transitions as specified by the occurrence elements in the occurrence set.