

Problem 1

Mark the following statements as true or false 5 points

1. In a Place/Transition Petri net a place has a ceiling on the number of tokens it can hold. (**True**)
2. In a Petri net, two or more transitions can fire simultaneously when enabled in the same state. (**False**)
3. Soundness allows a marking on the form $(0; 0; \dots; 1; 0; \dots; 1)$ where the leftmost element represents the input place to the net and the rightmost element represents the output place of the net with arbitrary number of places in between. (**False**)
4. Reachability graph helps find possible firing sequences of the respective net. (**True**)
5. Condition/Event nets is a subclass of Place/Transition nets. (**True**)

Soundness Checking

Problem 2

10 points

Check the Petri net in Figure 1 for soundness based on studying the reachability graph.

5 on reachability graph

5 on solution: **Sound**

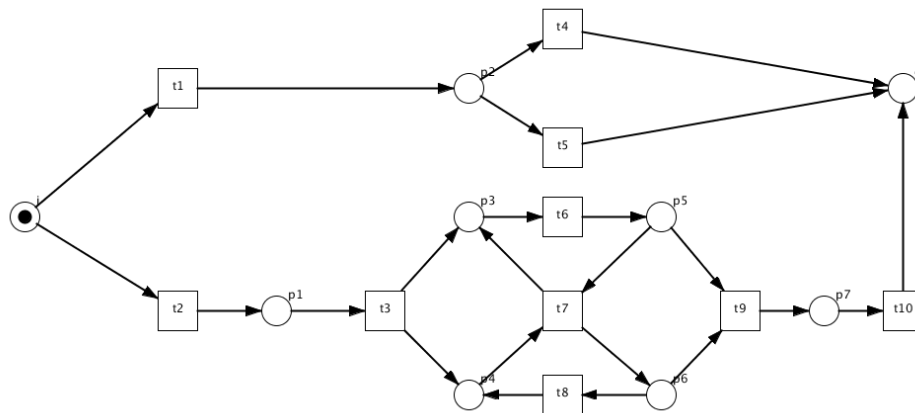


Figure 1. A workflow net

Solution:

