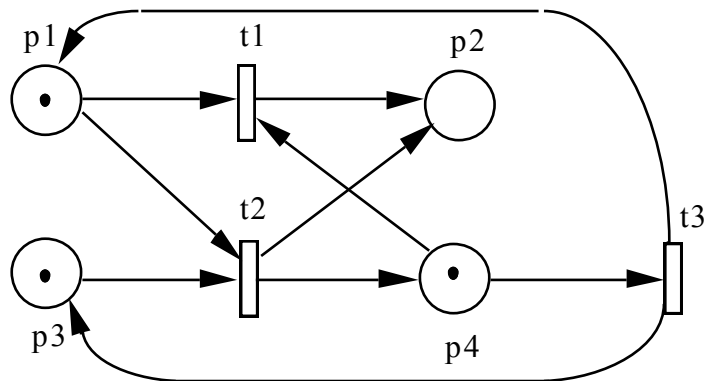


CEN 6075 – Software Specification, Spring 2011
Homework Assignment #2, Due Feb. 10 (Thursday)

Problem 1 (5 points): System Modeling using Low Level Petri Nets

A mailing system has three senders and two receivers, and a mail box of capacity of two messages. Senders can send messages as long as the mail box is not full. Messages must be received in the order that they were sent. When two messages were sent simultaneously, their orders are decided non-deterministically.

Problem 2 (5 points): Petri Net Analysis Using Reachability Tree



- (1) Construct a reachability (coverability) tree of the above Petri net.
- (2) Is there any unbounded place?
- (3) Is there any dead transition?