

#7

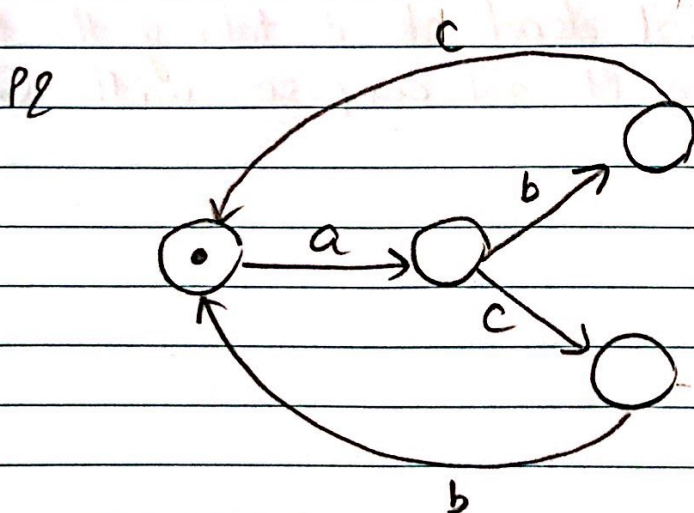
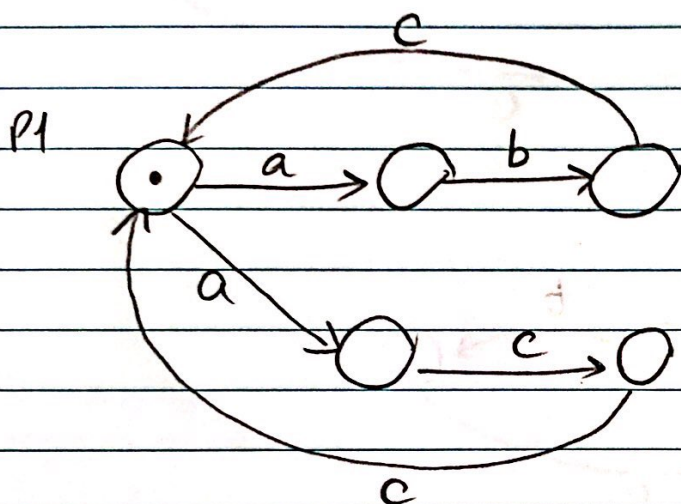
$$P1 = (a \rightarrow b \rightarrow c \rightarrow P1$$

$$| a \rightarrow c \rightarrow b \rightarrow P1)$$

$$P2 = (a \rightarrow (b \rightarrow c \rightarrow P2 \mid c \rightarrow b \rightarrow P2))$$

$$Q = (b \rightarrow c \rightarrow Q)$$

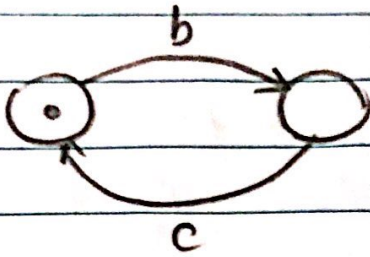
$$* \text{Traces}(P1) = \text{Traces}(P2)$$



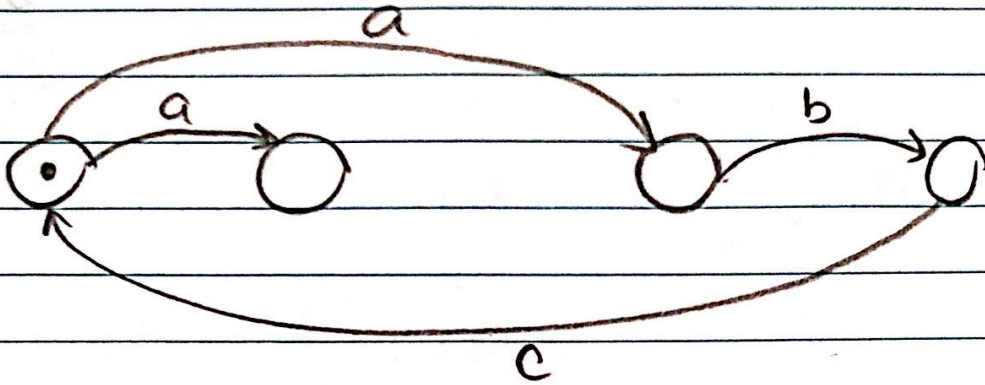
$LTS(P1)$  and  $LTS(P2)$  are isomorphic, so  $\text{Traces}(P1) = \text{Traces}(P2)$

From both processes, we need to perform action  $a$ . Then, we can either perform  $b$  or  $c$ . After that, we will perform  $c$  or  $b$  accordingly

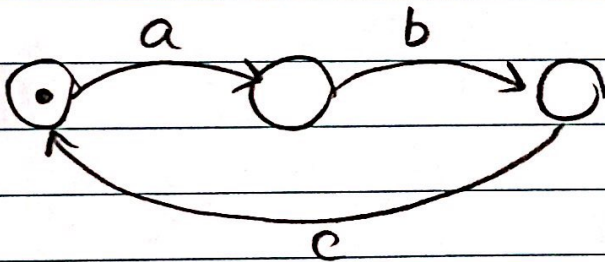
Q



P1Q



P2Q



P1Q has potential deadlock if taking the trace  $a \rightarrow c \rightarrow b \rightarrow P1$  in P1 and compose with Q