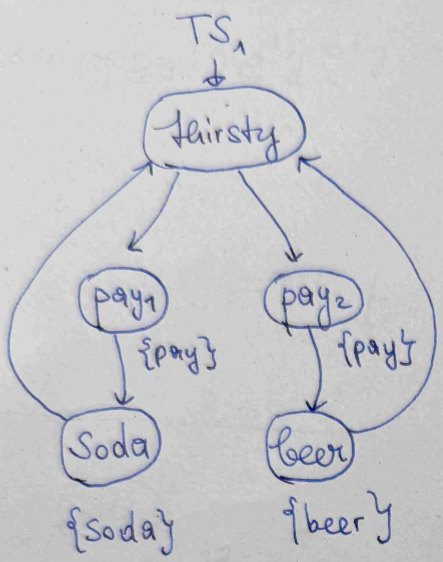
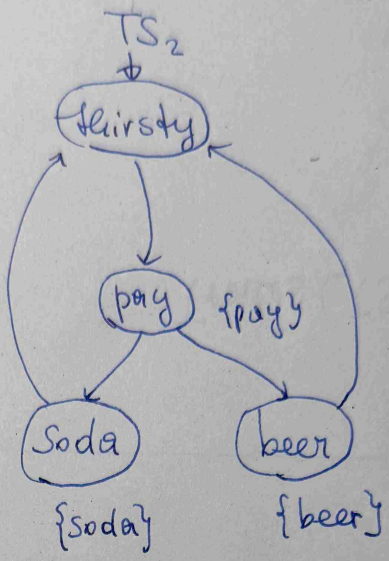


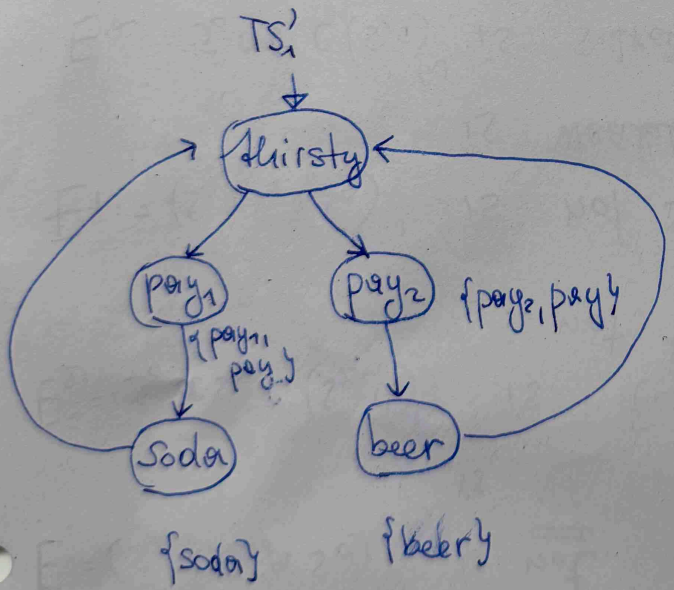


$AP := \{pay, soda, beer\}$

Thm. over AP

$$Traces(TS_1) \subseteq Traces(TS_2) \iff \forall LT\text{-prop } P\ [TS_1 \models P \Leftarrow TS_2 \models P]$$

$$Traces(TS_1) = Traces(TS_2) \iff \forall LT\text{-prop. } P\ [TS_1 \models P \Leftrightarrow TS_2 \models P]$$



$AP' = \{pay, pay_1, pay_2, soda, beer\}$

Then:

$$Traces(TS_2) \subseteq Traces(TS_1')$$

and hence

$$\forall LT\text{-prop. } P \text{ over } AP'\ [TS_1 \models P \Rightarrow TS_2 \models P]$$