Exercise 8.1:
Given the positive program $P_i$, apply the $T_{P_i}$ operator until you read a fixpoint.

$$P_1 = \{ \begin{align*}
&b ← a, \\
&c ← b, a, \\
&d ← b, \\
&f ← c, d, \\
&a ← \}
\end{align*}$$

$$P_2 = \{ \begin{align*}
&f ← e, \\
&d ← a, b, \\
&a ← c, \\
&f ← c, d, \\
&b ← c \}
\end{align*}$$

$$P_3 = \{ \begin{align*}
&a ← b, \\
&b ← a, \\
&c ← a, b \}
\end{align*}$$

Exercise 8.2:
Consider the following program

$$P = \{ \begin{align*}
&a ← b; \\
&b ← a, not c; \\
&a ← d; \\
&d ← not c \}
\end{align*}$$

a) Give all nogoods one can obtain from program completion.

b) Is the set $U = \{a, b\}$ unfounded with respect to the following (partial) assignments? Justify your answer.

i) $\{Fc\}$

ii) $\{Tc\}$

iii) $\{Ta, Fd\}$