1. \[ X = \{ x^2 \}, \quad p(v) = \emptyset, \quad \forall v \in V \]

2. While (there is either an f-unsaturated arc \( a = (u, v) \) or an f-positive arc \( a = (v, u) \) with \( u \in X \) and \( v \in V - X \)), do
\[ X = X \cup \{v\}, \]

\[ p(v) = u \]

end (while)

If \( y \in X \), then find \( \exists(p) \)

\[ = \min \{ \exists(a): a \in P \} \]

where \( P \) is the \( x-y \) path defined by the predicates \( p \).
for a forward arc \( a \) of \( P \)
\[
f(a) = f(a) + \varepsilon(p).
\]

for a reverse arc \( a \) of \( P \)
\[
f(a) = f(a) - \varepsilon(p)
\]
return \( f, \ 2^t(x) \)
\textbf{Circulations}

\[ x \quad v \in V - \{x, y\} \quad y \]

\[ f^+(v) = f^-(v) \]

If for all \( v \in V \), \( f^+(v) = f^-(w) \)
\[ s(a) \rightharpoonup \text{val}(f) \]
\[ \text{support} \left\{ a \in A : f(a) \neq 0 \right\} \]
$f_c(a) = 1$  $f_c(a) = -1$