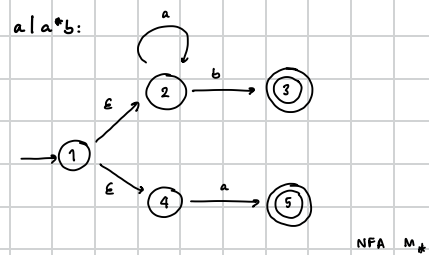


NFA M_* equivalent to the revised version of NFA M from exercise 6:



DFA M'_* is $(Q'_*, \Sigma, \delta'_*, q'_{*0}, F'_*)$, where

$$Q'_* = \mathcal{P}(Q_*),$$

$$\Sigma = \{a, b\},$$

$$\delta'_*: Q'_* \times \Sigma \rightarrow Q'_*; \quad \delta'_*(R, x) = \{q_* \mid q_* \in \delta_*(r, x) \text{ for some } r \in R\},$$

$$q'_{*0} = \{q_{*0}\},$$

$$F'_* = \{R \in Q'_* \mid R \text{ intersects } F_*\}.$$

Applying subset construction:

States	a	b
$\{1, 2, 4\}$	$\{2, 5\}$	$\{3\}$
$\{2, 5\}$	$\{2\}$	$\{3\}$
$\{3\}$	\emptyset	\emptyset
$\{2\}$	$\{2\}$	$\{3\}$
\emptyset	\emptyset	\emptyset

