



$$Q = \{q_0, q_1, q_2, q_3\}$$

$$\Sigma = \{1, 2\}$$

$$q_0 = q_0$$

$$F = \{q_3\}$$

$$\Gamma = \{1, 2, \$\}$$

$\delta$	$\epsilon$				$1$				$2$			
	$\epsilon$	$1$	$2$	$\$$	$\epsilon$	$1$	$2$	$\$$	$\epsilon$	$1$	$2$	$\$$
$q_0$	$\{(q_0, \$)\}$											
$q_1$	$\{(q_1, \epsilon)\}$											
$q_2$	$\square$				$\square$				$\square$			
$q_3$												

$$\begin{aligned}
& q_0(2112, \sqcup) \rightarrow q_1(2112, \boxed{1}) \\
& \rightarrow q_1(112, \boxed{2}) \rightarrow q_1(12, \boxed{2}) \rightarrow \\
& q_2(12, \boxed{2}) \rightarrow q_2(2, \boxed{2}) \rightarrow \\
& q_2(\epsilon, \boxed{1}) \rightarrow q_3(\epsilon, \sqcup)
\end{aligned}$$


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$$5 \rightarrow 151 \mid 252 \mid \epsilon$$

$$5 \rightarrow 252 \rightarrow 21512 \rightarrow 2112$$