$$\begin{split} A &\rightarrow N, S' \mid E, C \mid 0 \\ B &\rightarrow N, D \mid E, S' \mid 1 \\ S &\rightarrow N, B \mid eps \mid E, A \\ C &\rightarrow A, A \\ S' &\rightarrow N, B \mid E, A \\ D &\rightarrow B, B \\ E &\rightarrow 1 \\ N &\rightarrow 0 \end{split}$$



