

$A \rightarrow NS' \mid EC \mid 0$
 $B \rightarrow ND \mid ES' \mid 1$
 $S \rightarrow NB \mid eps \mid EA$
 $C \rightarrow AA$
 $S' \rightarrow NB \mid EA$
 $D \rightarrow BB$
 $E \rightarrow 1$
 $N \rightarrow 0$

