

1.  $S \rightarrow aSbS \mid bSaS \mid \lambda$
2.  $S \rightarrow aSaSbS \mid bSaSaS \mid aSbSaS \mid \lambda$
3.  $S \rightarrow aSa \mid bSb \mid a \mid b \mid \lambda$
4.  $S \rightarrow aaXb \mid \lambda$   
     $X \rightarrow aaXb \mid aaa$