The automaton diagram shows:

States l_0 and l_1, with l_1 being an accepting state.

Transition from l_0 to l_1: $\lambda, \lambda \rightarrow S$

Self-loop transitions on l_1:
- $\lambda, S \rightarrow \lambda$
- $\lambda, S \rightarrow aB$
- $\lambda, S \rightarrow bA$
- $\lambda, A \rightarrow aS$
- $\lambda, A \rightarrow bAA$
- $\lambda, B \rightarrow bS$
- $\lambda, B \rightarrow aBB$
- $a, a \rightarrow \lambda$
- $b, b \rightarrow \lambda$

1.
2. S->aSXXX | Lambda
   X->aXXX | b
3. S->Lambda|X|aX|bY
   X->XX|bYX|bS
   Y->XY|aXY|bYY|aS