1. Let \( L_1 \) be the language of all binary strings that start with a 0 and end with a 1. Divide the following strings into equivalence classes with respect to \( L_1 \). That is, which pairs are distinguishable and which pairs are indistinguishable?

\[
\begin{array}{ccccccc}
0 & 1 & 10 & 01 & 0110 & 010101 \\
\end{array}
\]

2. Same question, but with the language \( L_2 \) of all binary strings with both an even number of 0s and an even number of 1s.

3. Same question, but with the language \( L_3 \) of all binary palindromes.