1. Give a low-level description of a Turing machine that decides the following language.

$$L_1 = \{x\#y \mid x, y \in \{0,1\}^*, x = y\}$$

2. Give a low-level description of a Turing machine that decides the following language.

$$L_2 = \{x\#y \mid x, y \in \{0,1\}^*, y = \overline{x}\}$$

where $\overline{x}$ denotes the bitwise complement of x.