130. The $X_1, ..., X_n$ be a random sample from a population with PDF

$$P_\theta(X = x) = \theta^x (1 - \theta)^{1-x}, \quad x = 0 \text{ or } 1, \quad 0 \le \theta \le 0.5.$$

(a) Find the MME of $\theta$.

(b) Find the MLE of $\theta$.