Exercise: MLE for univariate Gaussian

Show that the MLE for a univariate Gaussian is given by

$$\hat{\mu} = \frac{1}{N} \sum_{n=1}^{N} y_n \tag{1}$$

$$\hat{\sigma}^2 = \frac{1}{N} \sum_{n=1}^{N} (y_n - \hat{\mu})^2$$
 (2)