Exercise: MLE for the univariate Gaussian

Show that the MLE for a univariate Gaussian is given by

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

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