WEEKLY PARTICIPATION 2: MLE FOR POISSON REGRESSION

Recall that in Poisson regression we model $y|\mathbf{x} \sim \text{Poisson}(\exp(\boldsymbol{\theta}^T\mathbf{x}))$.

- Give the expression for $p_{\boldsymbol{\theta}}(y_i|\mathbf{x}_i)$.
- State, in as simple a form you can manage, the optimization problem for finding an estimate $\hat{\boldsymbol{\theta}}$ of $\boldsymbol{\theta}$ by using MLE for Poisson regression.