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### **Fundamentals**

* **Ordinary Least Squares (OLS)**: OLS is a statistical method used to estimate the parameters of a linear regression model. The goal of OLS is to find the line that minimizes the sum of the squared differences between the observed data points and the points on the line.
* **Generalized Linear Models (GLMs)**: GLMs are a flexible generalization of ordinary linear regression that allows for response variables that have error distribution models other than a normal distribution.

### **Key Statistics**

* **R-squared**: A statistical measure that indicates the proportion of the variance in the dependent variable that is explained by the independent variables.
* **AIC (Akaike Information Criterion)**: An estimator of prediction error for a statistical model. It's used to compare different models and select the one that is most likely to make good predictions.
* **BIC (Bayesian Information Criterion)**: Similar to AIC, but it places a larger penalty on models with more parameters.
* **Log-likelihood**: The probability of observing the data given a set of model parameters.

### **Libraries**

* **statsmodels**: A Python module that provides classes and functions for the estimation of many different statistical models, as well as for conducting statistical tests, and statistical data exploration.
* **scikit-learn**: A Python library that provides a wide range of algorithms for machine learning tasks, including regression, classification, clustering, and dimensionality reduction.
* **matplotlib.pyplot**: A Python plotting library that produces high-quality figures in a variety of formats.