* The cost function calculates the difference between predicted and actual outputs in linear regression.
  + One of the more common ones that are used are square error function
* The goal of linear regression is to find the parameters Θ0 and Θ1 that minimize the cost function.
  + Linear Regression is gets the hypothesis: H(x) = Θ0 + Θ1 \* x
* By minimizing the cost function, the hypothesis function H(x) fits the data well, minimizing the error between predictions and actual values.
* The cost function is represented as J(Θ0, Θ1) = (1/2m) \* Σ(H(x) - y)² over training examples.
* Θ0 and Θ1 represent the model parameters that determine the slope and intercept of the hypothesis function.
* Different parameter values result in different hypotheses, each with its own slope and intercept.
* The squared error cost function is commonly used in regression problems due to its effectiveness and mathematical simplicity.

