

## **Assignment 2: Linear Regression with Multiple Variables**

### **1. Problem Description**

The real estate market in Boston is fiercely competitive, and you want to become the best real estate agent in the region. In order to better compete with peers, you have decided to use some basic concepts of machine learning to help customers set the best selling price for their property. Fortunately, you have found a dataset of housing prices in Boston, which aggregates housing price data from suburban Boston with multiple characteristic dimensions. Your task is to establish a linear regression model with multiple variables to evaluate the optimal selling price of a property for your clients.

### **2. Dataset Introduction**

File Assignment2data.txt is the dataset. The first column represents the size of a house, the second column represents how many bedrooms the house has, and the third column represents the price of the house.

### **3. Requirements**

- a. Establishing a linear regression model with multiple variables.
- b. Predict the price of the house with a size of 1650 feet and 3 bedrooms.