Leslie Salt Data Set

In 1968, the city of Mountain View, California, began the necessary legal proceedings to acquire a parcel of land owned by the Leslie Sal Company. The Leslie property contained 246.8 acres and was located right on the San Francisco Bay. The land had been used for salt evaporation and had an elevation of exactly sea level. However, the property was diked so that the waters from the bay park were kept out. The city of Mountain View intended to fill the property and use it for a city park.

Ultimately, it fell into the courts to determine a fair market value for the property. Appraisers were hired, but what made the processes difficult was that there were few sales of byland property and none of them corresponded exactly to the characteristics of the Leslie property. The experts involved decided to build a regression model to better understand the factors that might influence market valuation. They collected data on 31 byland properties that were sold during the previous 10 years. In addition to the transaction price for each property, they collected data oina large number of other factors, including size, time of sale, elevation, location, and access to sewers. A listing of these data, including only those variables deemed relevant for this exercise. A description of the variables is provided below.

|  |  |
| --- | --- |
| Variable name | Description |
| Price | Sales price in $000 per acre |
| County | San Mateo=0, Santa Clara =1 |
| Size | Size of the property in acres |
| Elevation | Average Elevation in foot above sea level |
| Sewer | Distance (in feet) to nearest sewer connection |
| Date | Date of sale counting backward from current time (in months) |
| Flood | Subject to flooding by tidal action =1; otherwise =0 |
| Distance | Distance in miles from Leslie Property (in almost all cases, this is toward San Francisco |

Discuss and Answer the following questions:

1. What is the nature of each of the variables? Which variable is dependent variable and what are the independent variables in the model?
2. Check whether the variables require any transformation individually
3. Set up a regression equation, run the model and discuss your results