

### Question 1

Ho: mean=7000USD

Ha: mean is not =7000USD

P-value according to t-test is 0.0174,

Decision is reject Ho=7000USD because p-value (0.0174) < alpha 0.05.

### Question 2

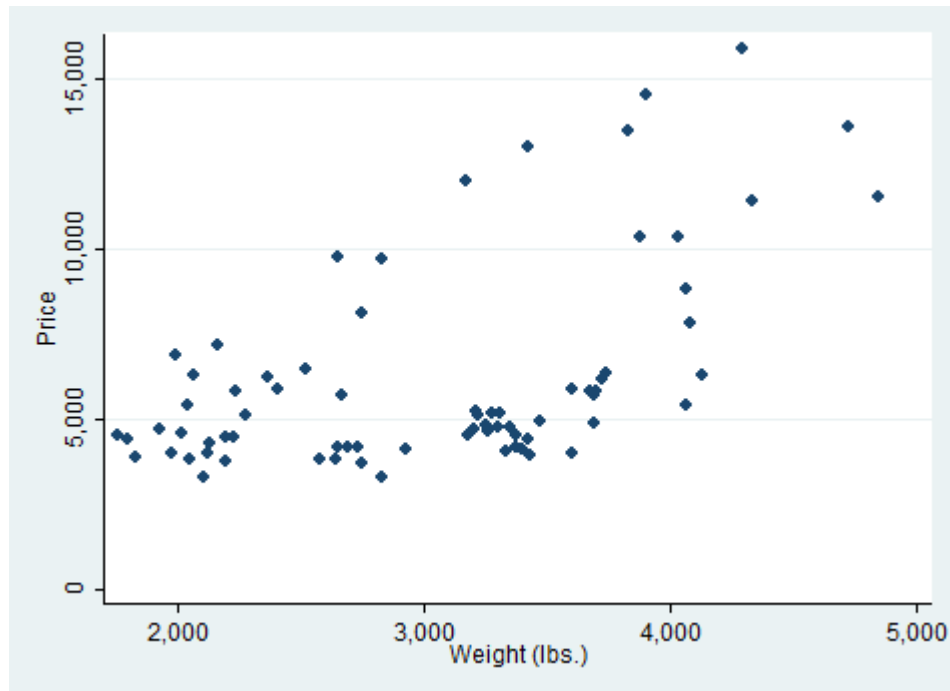
Ho; foreign cars are more expensive than domestic cars

Ha; foreign cars are not more expensive than foreign cars

P-value=0.6802

Decision: Fail to reject null; P-value (0.6802) > alpha value (0.05)

### Question 3



There is a weak positive correlation between weight and price of 0.5386

#### Question 4

The following independent variables are statistically significant in predicting price of a car  
rep78, weight, and length because their p-value is less than 0.05

$$\text{Price} = 12207.61 - 107.6681(\text{mpg}) + 943.1564(\text{rep78}) + 3.920286(\text{weight}) - 108.6199(\text{length}) + 8.000397(\text{displacement})$$