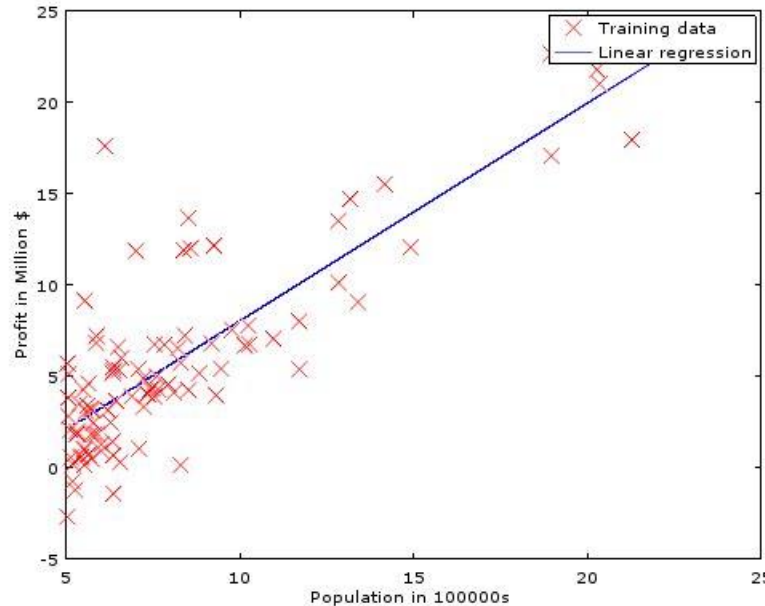
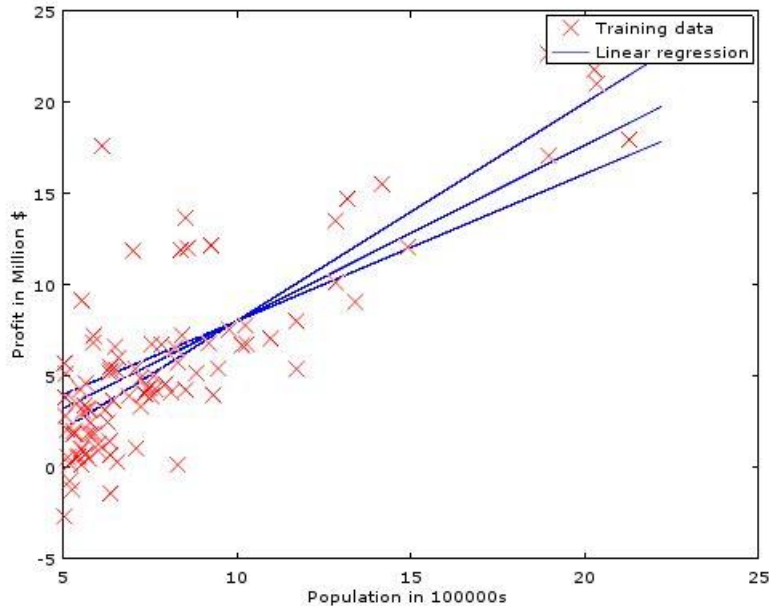


Linear Regression with One Variable

$\alpha=0.02$, $\alpha=0.002$, $\alpha=0.0001$

$\alpha=0.02 \rightarrow$ Best



$\alpha=0.02$:
Theta0= -3.87 Theta1=1.19
Profit Prediction: 3.805

$\alpha=0.002$:
Theta0=-1.58 Theta1=0.96
Profit Prediction: 4.614

$\alpha=0.0001$:
Theta0=-0.027
Theta1=0.804
Profit Prediction: 5.161

For a population of 645996 , the total predicted profit is : 3.805 Million
Using $\alpha=0.02$, Profit= $-3.87 + 1.19 * (6.45) = 3.805$