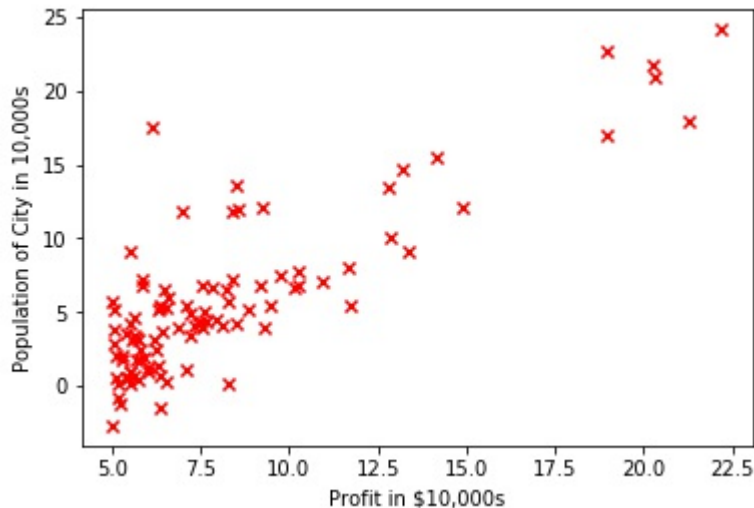


Python 3.7.1 (default, Dec 14 2018, 19:28:38)
Type "copyright", "credits" or "license" for more information.

IPython 7.1.1 -- An enhanced Interactive Python.

```
In [1]: runfile('/home/lzz/Downloads/Stanford-Machine-Learning-camp-master/  
Assignments/machine-learning-ex1/ex1/ex1.py', wdir='/home/lzz/Downloads/Stanford-  
Machine-Learning-camp-master/Assignments/machine-learning-ex1/ex1')  
Plotting Data...
```



Program paused. Press ENTER to continue

Running Gradient Descent...

Initial cost : 32.072733877455676 (This value should be about 32.07)

Theta found by gradient descent: [-3.63029144 1.16636235]

Program paused. Press ENTER to continue

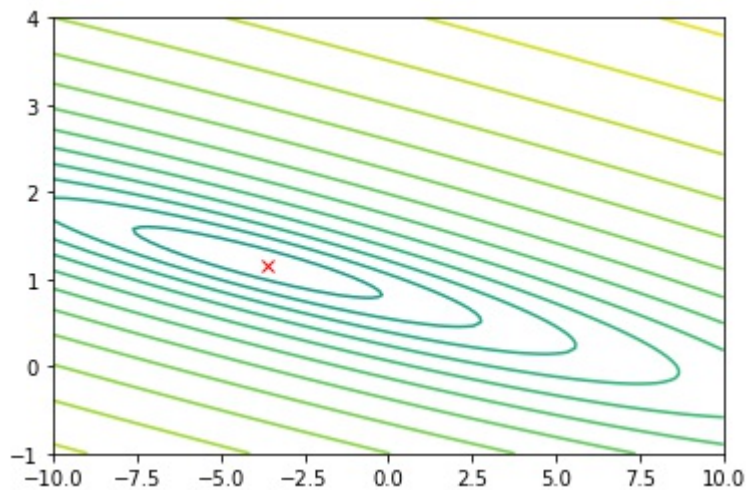
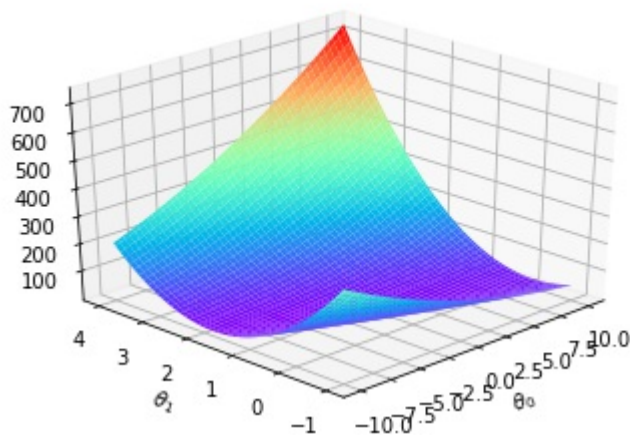
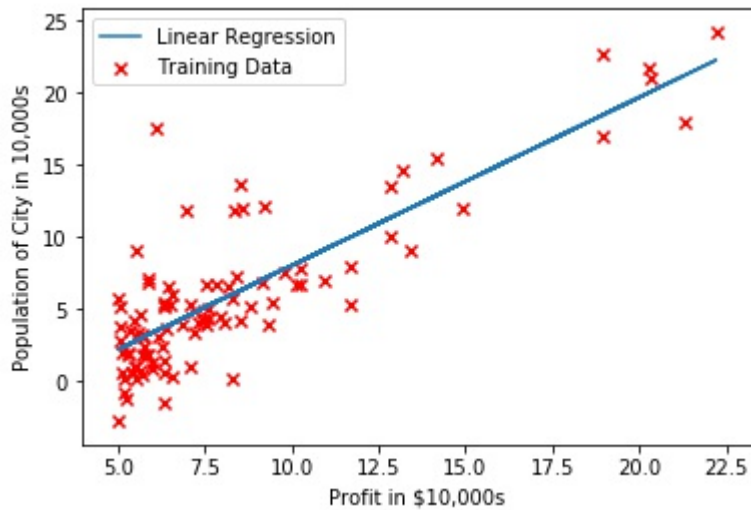
For population = 35,000, we predict a profit of 4519.768 (This value should be about 4519.77)

For population = 70,000, we predict a profit of 45342.450 (This value should be about 45342.45)

Program paused. Press ENTER to continue

Visualizing J(theta0, theta1) ...

ex1 Finished. Press ENTER to exit



```
In [2]: runfile('/home/lzz/Downloads/Stanford-Machine-Learning-camp-master/
Assignments/machine-learning-ex1/ex1/ex1_multi.py', wdir='/home/lzz/Downloads/
Stanford-Machine-Learning-camp-master/Assignments/machine-learning-ex1/ex1')
Loading Data...
```

First 10 examples from the dataset:

```
x = [2104    3], y = 399900
x = [1600    3], y = 329900
x = [2400    3], y = 369000
x = [1416    2], y = 232000
```

```
x = [3000    4], y = 539900
x = [1985    4], y = 299900
x = [1534    3], y = 314900
x = [1427    3], y = 198999
x = [1380    3], y = 212000
x = [1494    3], y = 242500
```

Program paused. Press ENTER to continue

Normalizing Features ...

Running gradient descent ...

Theta computed from gradient descent :

```
[340410.91897274 110308.11337059 -6326.5381075 ]
```

Predicted price of a 1650 sq-ft, 3 br house (using gradient descent) : 293149.994

Program paused. Press ENTER to continue

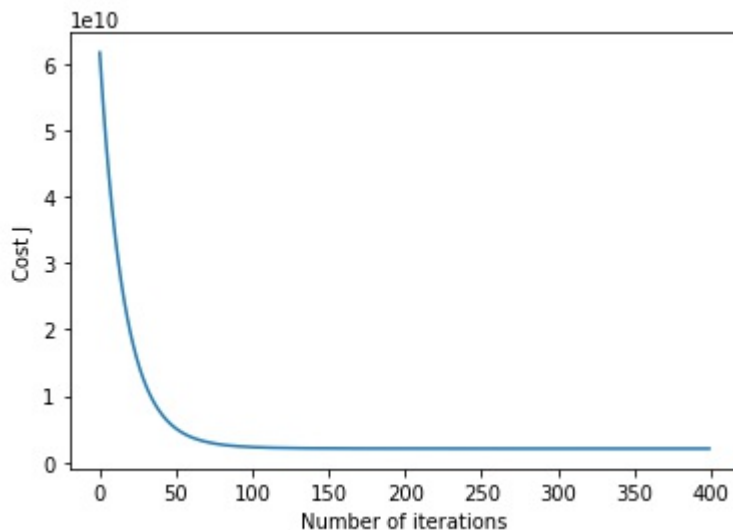
Solving with normal equations ...

Theta computed from the normal equations :

```
[89597.9095428    139.21067402 -8738.01911233]
```

Predicted price of a 1650 sq-ft, 3 br house (using normal equations) : 293081.464

ex1_multi Finished. Press ENTER to exit



In [3]: