9 Linear Regression

The file *car_efficiency.csv* contains the MPGs and the weights of different cars. Find the correlation between the two. This means, let

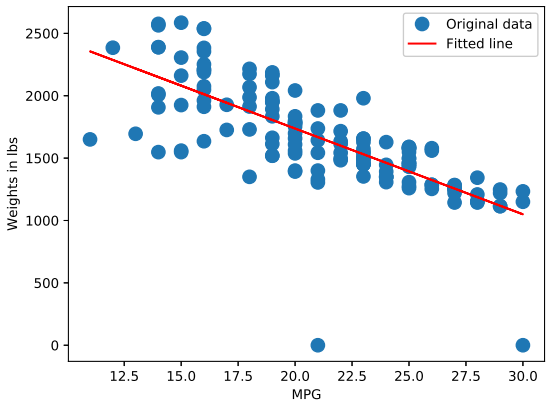
$$x_i = \text{MPG of the ith car},$$

$$y_i = \text{weight of the ith car},$$

find m and p such that

$$y_i \approx m \cdot x_i + p, \text{ for all } i$$

It should look like:



To read the file use the following command:

```
x = []
y = []
with open('car_efficiency.csv', newline='') as csvfile:
    spamreader = csv.reader(csvfile, delimiter=',', quotechar='|')
    for row in spamreader:
        x.append(float(row[0]))
        y.append(float(row[1]))
x = np.array(x)
y = np.array(y)
```