

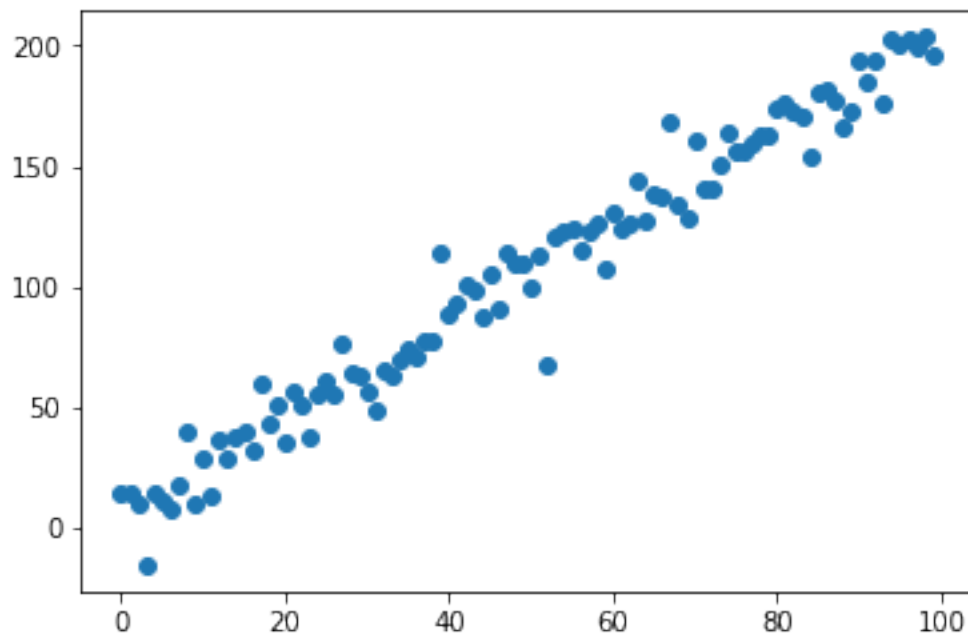
Regression

August 8, 2018

```
In [1]: import matplotlib.pyplot as plt
        %matplotlib inline
        import numpy as np
        from sklearn import datasets, linear_model

        X = np.array(range(100))
        y = 2*X+5 + np.random.normal(0,10,100)
        plt.scatter(X,y)
```

```
Out[1]: <matplotlib.collections.PathCollection at 0x7f4b3eab0710>
```



```
In [2]: regressor = linear_model.LinearRegression()
        lm = regressor.fit(X.reshape(-1,1), y.reshape(-1,1))
        plt.scatter(X,y)
        plt.plot(X, lm.predict(X.reshape(-1,1)), color='red', linewidth=4)
```

Out[2]: [

