

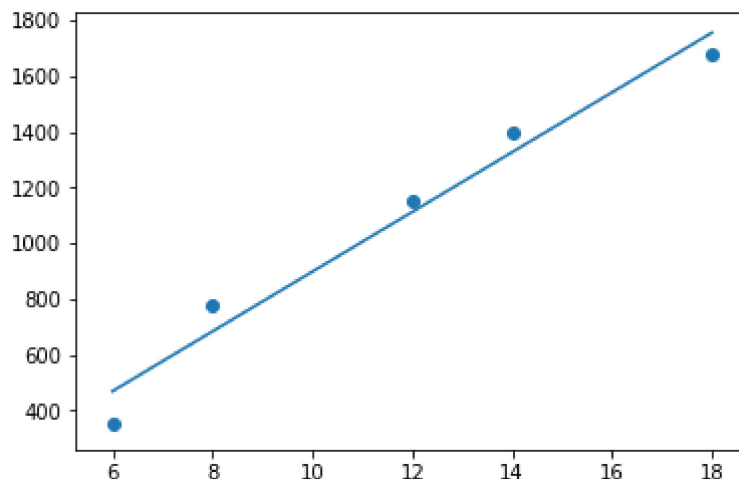
```
In [1]: import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
%matplotlib inline
```

```
In [2]: x = np.array([6, 8, 12, 14, 18])
y = np.array([350, 775, 1150, 1395, 1675])
def MX(x,y):
    m = (np.mean(x)*np.mean(y) - np.mean(x*y))/((np.mean(x)**2)-np.mean(x**2))
    c = np.mean(y) - m*np.mean(x)
    yy = []
    for i in x:
        yy.append(m*i+c)

    return yy
```

```
In [3]: line_old = MX(x, y)
plt.plot(x,line_old)
plt.scatter(x,y)
```

Out[3]: <matplotlib.collections.PathCollection at 0x1edd06ea9b0>



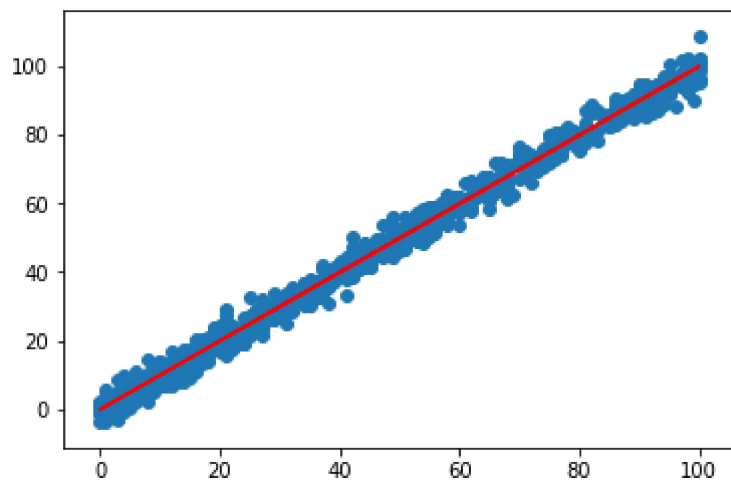
```
In [4]: df = pd.read_csv('train.csv').dropna()
x_new = df['x']
y_new = df['y']
```

```
In [5]: def MX(x,y):
    m = (np.mean(x)*np.mean(y) - np.mean(x*y))/((np.mean(x)**2)-np.mean(x**2))
    c = np.mean(y) - m*np.mean(x)
    yy = []
    for i in x:
        yy.append(m*i+c)

    return yy
```

```
In [6]: line = MX(x_new, y_new)
plt.plot(x_new, line, 'r')
plt.scatter(x_new, y_new)
```

Out[6]: <matplotlib.collections.PathCollection at 0x1eddd0cd3128>



In []: