In [1]:

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
```

In [2]:

```
d=pd.read_csv("test.csv")

x1=d['x']
y1=d['y']

x=np.array(x1)
y=np.array(y1)

x_bar=x.mean()
y_bar=y.mean()

xxyy=x*y

xy=np.array(xxyy)
xy_bar=xy.mean()

x_bar_2=x_bar**2

x_2=(x**2)
x_2_bar=x_2.mean()
```

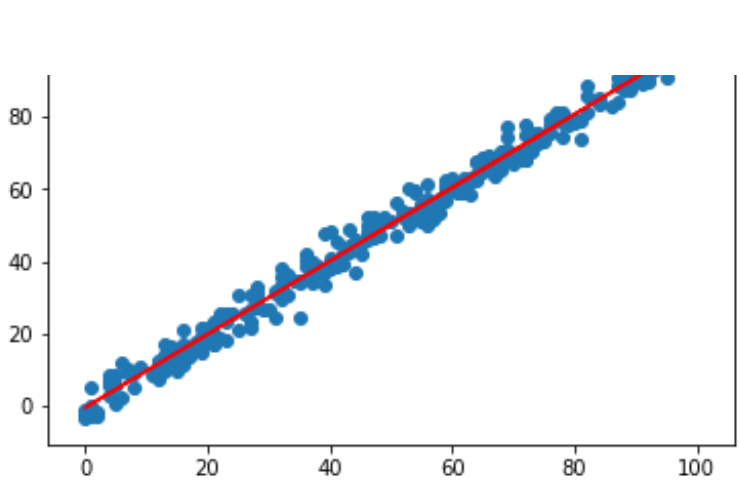
In [3]:

```
m=((x_bar * y_bar ) - xy_bar ) / (x_bar_2 - x_2_bar)


c=y_bar -(m * x_bar )


print(m)
print (c)
l=len(x)
```

```
1.0143353551195178
-0.4618107736611776
```

In [4]:

```
yyy=[]
for i in range(l):
    yyy.append(m*x[i]+c)
y_y=np.array(yyy)

plt.plot(x,y_y,c='r')
plt.scatter(x,y)
plt.show()
```


80
60
40
20
0
0
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100