In [4]:

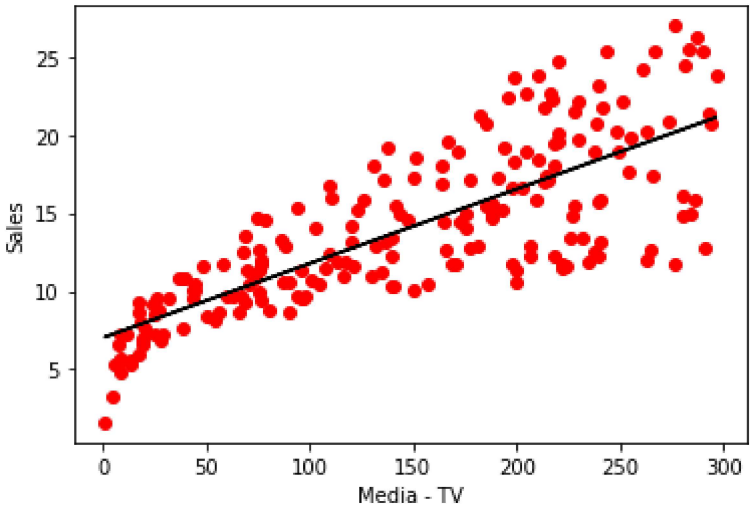
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as pl
from sklearn.linear_model import LinearRegression

#Load data
ad = pd.read_csv('C:/Users/visha/Desktop/Linear_Regression/Reproduce_fig3.2/Advertis

#Linear reg
x = np.array(ad['TV']).reshape(-1,1)
y = ad['Sales']
lrmodel = LinearRegression().fit(x,y)
print (lrmodel.coef_, lrmodel.intercept_)

#plot
pl.scatter(ad['TV'], ad['Sales'], c='r')
pl.plot(ad['TV'], lrmodel.intercept_+lrmodel.coef_*ad['TV'], 'k')
pl.xlabel('Media - TV')
pl.ylabel('Sales')
pl.savefig('Fig3.1.png')
pl.show()
```

```
[0.04753664] 7.032593549127695
```



In [ ]:

```
C:\Users\visha\Desktop\Linear_Regression\Reproduce_fig3.2
```

In [ ]: