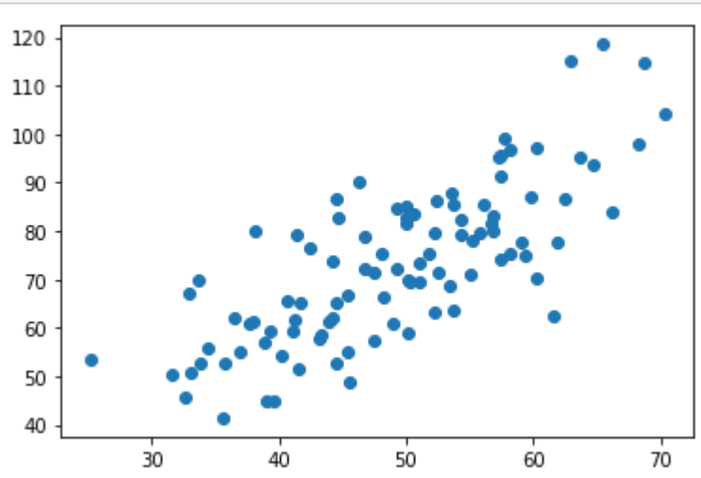
In [2]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
df = pd.read_csv("https://raw.githubusercontent.com/chasinginfinity/ml-from-scratch/master/02%20Linear%20Regression%20using%20Gradient%20Descent/data.csv")
print(df)
```

```
    32.502345269453031  31.70700584656992
0            53.426804          68.777596
1            61.530358          62.562382
2            47.475640          71.546632
3            59.813208          87.230925
4            55.142188          78.211518
..                 ...                ...
94           50.030174          81.536991
95           49.239765          72.111832
96           50.039576          85.232007
97           48.149859          66.224958
98           25.128485          53.454394

[99 rows x 2 columns]
```

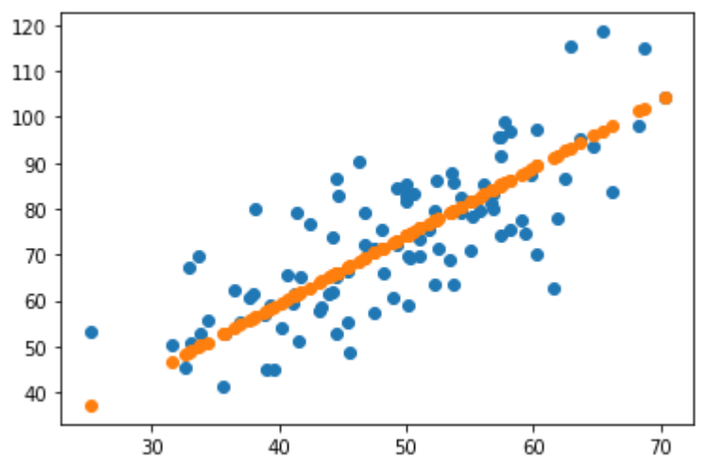
In [3]:
```
x = df.iloc[:,0]
y = df.iloc[:,1]
plt.scatter(x,y)
plt.show()
```



In [8]:
```
m= 0
c = 0
L = 0.0001
n = len(x)
for i in range(n):
    y_pred = m*x + c
    D_m = (-2/n)*sum(x*(y-y_pred))
    D_c = (-2/n)*sum(y-y_pred)
    m = m - L*D_m
    c = c - L*D_c
print(c,m)
```

```
0.0362353540942316 1.4809284677644328
```

In [9]:
```
y_pred = m*x + c
plt.scatter(x,y)
plt.scatter(x,y_pred)
plt.show()
```



In [ ]: