In [7]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
```

In [10]:
```
data = pd.read_csv("veriler.csv")
Y = data["boy"].values
X1 = data["kilo"].values
X2 = data["yas"].values
X3 = data["cinsiyet"].values
data
```

Out[10]:

	boy	kilo	yas	cinsiyet
0	130	30	10	1
1	125	36	11	1
2	135	34	10	0
3	133	30	9	0
4	129	38	12	1
5	180	90	30	1
6	190	80	25	1
7	175	90	35	1
8	177	60	22	0
9	185	105	33	1
10	165	55	27	0
11	155	50	44	0
12	160	58	39	0
13	162	59	41	0
14	167	62	55	0
15	174	70	47	1
16	193	90	23	1
17	187	80	27	1
18	183	88	28	1
19	159	40	29	0

In [15]:
```
X_123 = data.drop("boy",axis=1)
X_123
```

Out[15]:

	kilo	yas	cinsiyet
0	30	10	1
1	36	11	1
2	34	10	0
3	30	9	0
4	38	12	1

	kilo	yas	cinsiyet
5	90	30	1
6	80	25	1
7	90	35	1
8	60	22	0
9	105	33	1
10	55	27	0
11	50	44	0
12	58	39	0
13	59	41	0
14	62	55	0
15	70	47	1
16	90	23	1
17	80	27	1
18	88	28	1
19	40	29	0

In [16]:
```
from sklearn.model_selection import train_test_split
x_train, x_test, y_train, y_test = train_test_split(X_123,Y,test_size=0.2)
```

In [25]:
```
x_train
```

Out[25]:

	kilo	yas	cinsiyet
2	34	10	0
3	30	9	0
10	55	27	0
18	88	28	1
13	59	41	0
11	50	44	0
8	60	22	0
7	90	35	1
14	62	55	0
5	90	30	1
1	36	11	1
16	90	23	1
19	40	29	0
12	58	39	0
9	105	33	1
17	80	27	1

In [26]:
```
x_test
```

Out[26]:

	kilo	yas	cinsiyet
0	30	10	1
6	80	25	1
4	38	12	1
15	70	47	1

In [27]:
```
y_train
```

Out[27]:
```
array([135, 133, 165, 183, 162, 155, 177, 175, 167, 180, 125, 193, 159,
       160, 185, 187], dtype=int64)
```

In [28]:
```
y_test
```

Out[28]:
```
array([130, 190, 129, 174], dtype=int64)
```

In [29]:
```
from sklearn.linear_model import LinearRegression
regressor = LinearRegression()
regressor.fit(x_train,y_train)
```

Out[29]:
```
LinearRegression()
```

In [41]:
```
tahmin = regressor.predict(x_test)
tahmin_serisi = pd.Series(tahmin)
tahmin_serisi
```

Out[41]:
```
0    122.304528
1    172.799566
2    130.433580
3    159.585177
dtype: float64
```

In [46]:
```
y_test_serisi = pd.Series(y_test)
total_data = dict(boy=y_test_serisi, tahmin=tahmin_serisi)
comparison_df = pd.DataFrame(total_data)
comparison_df
```

Out[46]:

	boy	tahmin
0	130	122.304528
1	190	172.799566
2	129	130.433580
3	174	159.585177

In [ ]:
```

```