```python
# Google Drive'ni ulash
from google.colab import drive
drive.mount('/content/drive')
```

```
Mounted at /content/drive
```

```python
# Kutubxonalarni import qilish
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns

# Grafiklar Colab'da ko'rinishi uchun
%matplotlib inline
```

```python
df = pd.read_excel('/content/drive/MyDrive/newcars.xlsx')
```

```python
df.head()              # Dastlabki 5 ta qator
```

	company	body-style	price
0	alfa-romero	convertible	13495.0
1	alfa-romero	convertible	16500.0
2	alfa-romero	hatchback	16500.0
3	audi	sedan	13950.0
4	audi	sedan	17450.0

```python
df.info()              # Ustunlar, turlari va null qiymatlar
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 61 entries, 0 to 60
Data columns (total 3 columns):
 #   Column      Non-Null Count  Dtype
---  ------      --------------  -----
 0   company     61 non-null     object
 1   body-style  61 non-null     object
 2   price       58 non-null     float64
dtypes: float64(1), object(2)
memory usage: 1.6+ KB
```

```python
df.describe()          # Statistik tavsif
```

	price
count	58.000000
mean	15387.000000
std	11320.259841
min	5151.000000
25%	6808.500000
50%	11095.000000
75%	18120.500000
max	45400.000000

```python
df.isnull().sum()      # Har bir ustundagi null qiymatlar soni
```

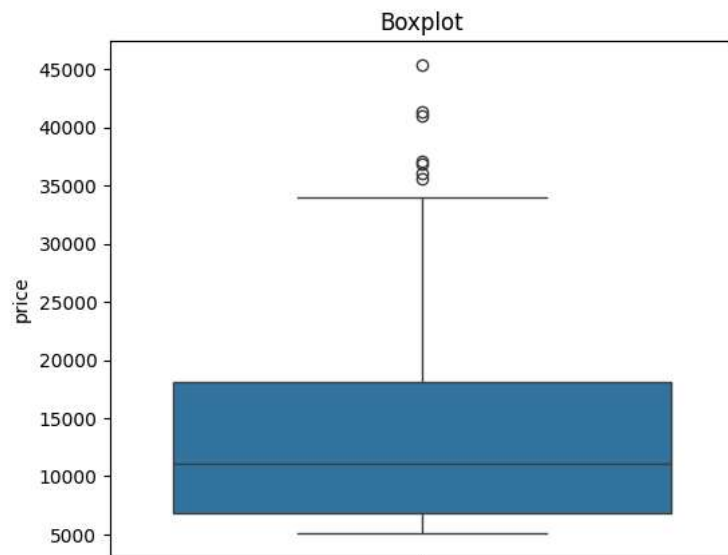|	0
company	0
body-style	0
price	3

```
# Histogramma
plt.figure(figsize=(8,5))
df['price'].hist(bins=20)
plt.title('Histogramma')
plt.xlabel('Qiymatlar')
plt.ylabel('Frekvensiya')
plt.show()
```
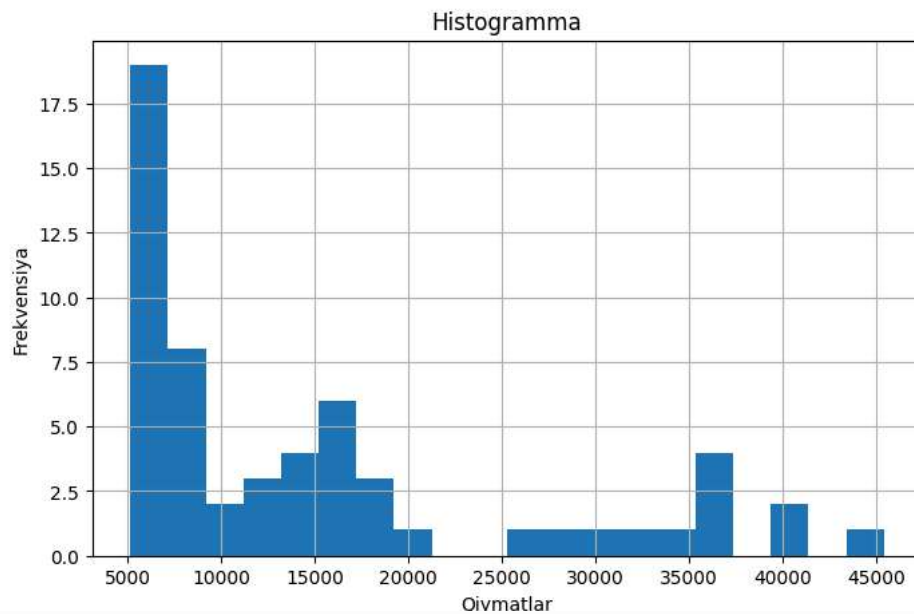


```
# Scatterplot
plt.figure(figsize=(8,6))
sns.scatterplot(x='price', y='company', data=df)
plt.title('Scatterplot')
plt.show()
```
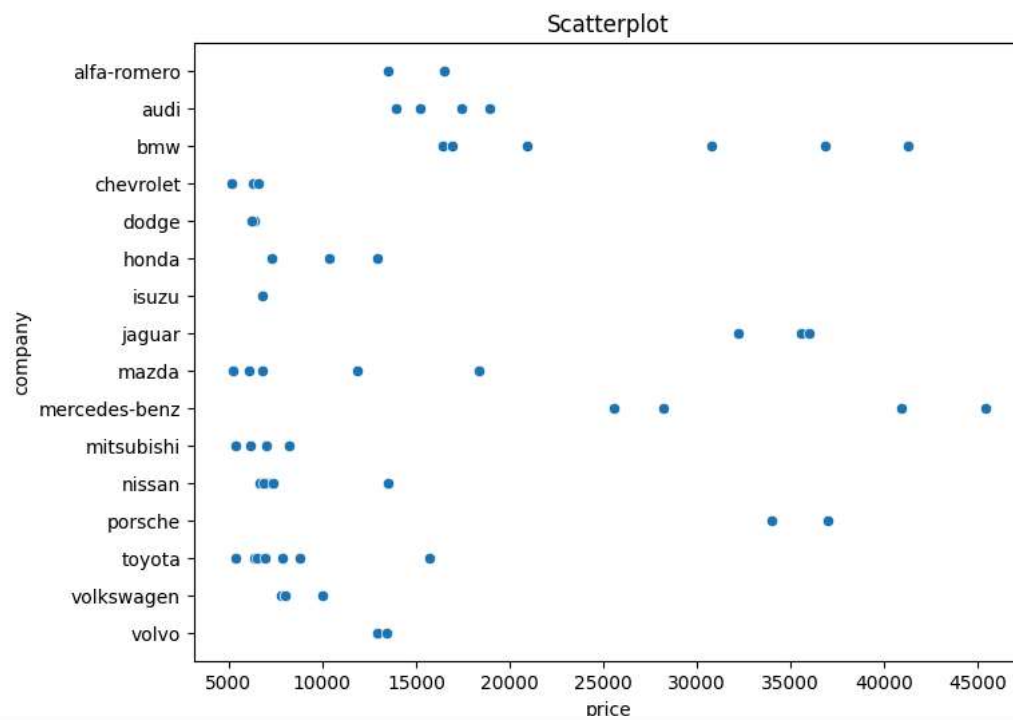


```
# Boxplot
plt.figure(figsize=(6,5))
sns.boxplot(data=df, y='price')
plt.title('Boxplot')
plt.show()
```

```
df.shape
```

    (61, 3)

Hisobot

```
# **Ma'lumotlar tahlili xulosasi:**

# - Datasetda jami 61 ta qator va 3 ta ustun mavjud.
# - Ba'zi ustunlarda null qiymatlar mavjud va ular tozalanishi kerak.
# - Histogramma asosida price o'zgaruvchining taqsimoti aniqlanadi.
# - Scatterplot orqali price va company orasida ijobiy bog'liqlik mavjudligi ko'rinadi.
# - Boxplotda esa outlierlar mavjudligi aniqlanadi.

# **Xulosa:**
# - Ushbu ma'lumotlar keyinchalik mashinani o'rganish uchun mos.
# - Tahlil asosida asosiy muhim ustunlar ajratib olindi.
```