

colab.research.google.com/drive/1vCj3uqZB7Vt77qau34YD15UAVgh-S0G#scrollTo=a-Oj4KR04A-q

project1.ipynb

File Edit View Insert Runtime Tools Help

Commands + Code + Text Run all

Files

..

sample\_data

heart (1).csv

Disk 69.53 GB available

[3]

from google.colab import files

uploaded = files.upload()

Choose Files No file chosen Cancel upload

[1]

Start coding or generate with AI.

heart (1).csv

1 to 10 of 1025 entries

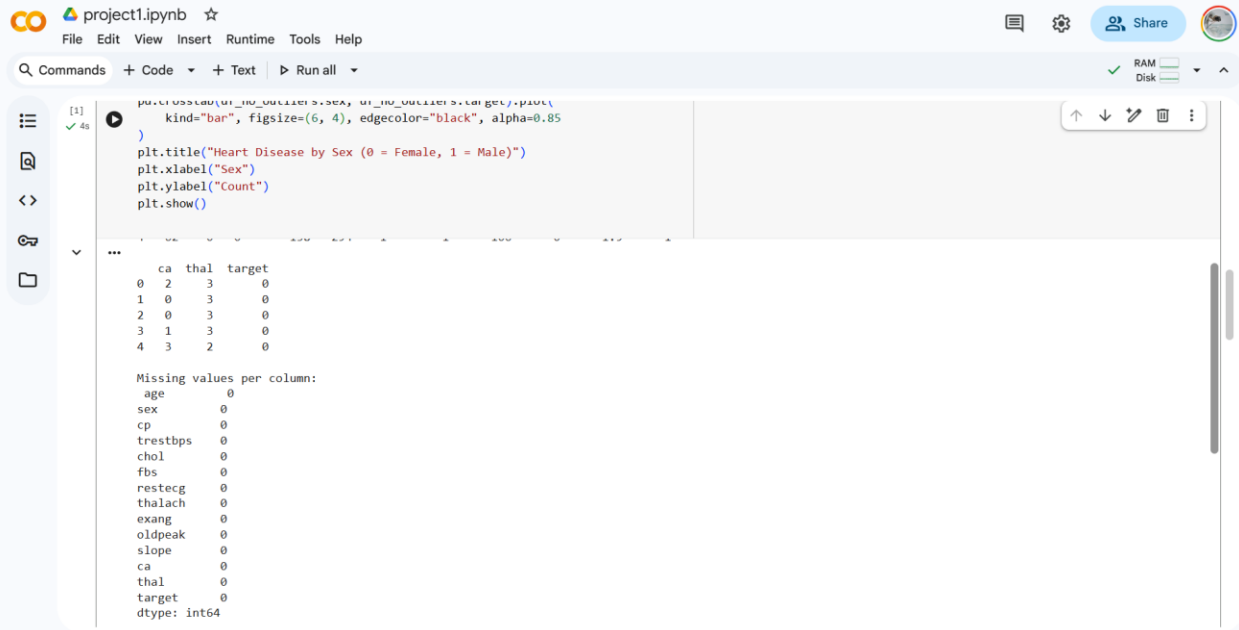
| age | sex | cp | trestbps | chol | fbs | restecg | thalach | exang |
|-----|-----|----|----------|------|-----|---------|---------|-------|
| 52  | 1   | 0  | 125      | 212  | 0   | 1       | 168     | 0     |
| 53  | 1   | 0  | 140      | 203  | 1   | 0       | 155     | 1     |
| 70  | 1   | 0  | 145      | 174  | 0   | 1       | 125     | 1     |
| 61  | 1   | 0  | 148      | 203  | 0   | 1       | 161     | 0     |
| 62  | 0   | 0  | 138      | 294  | 1   | 1       | 106     | 0     |
| 58  | 0   | 0  | 100      | 248  | 0   | 0       | 122     | 0     |
| 58  | 1   | 0  | 114      | 318  | 0   | 2       | 140     | 0     |
| 55  | 1   | 0  | 160      | 289  | 0   | 0       | 145     | 1     |
| 46  | 1   | 0  | 120      | 249  | 0   | 0       | 144     | 0     |
| 54  | 1   | 0  | 122      | 286  | 0   | 0       | 116     | 1     |

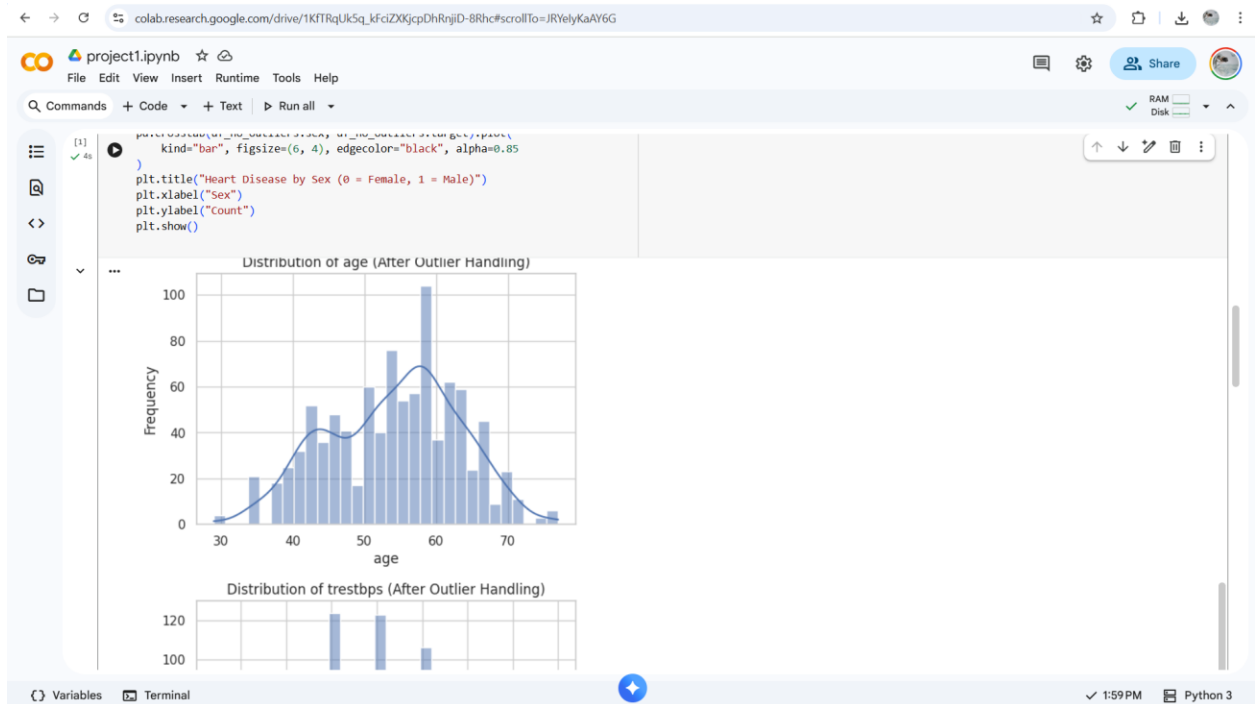
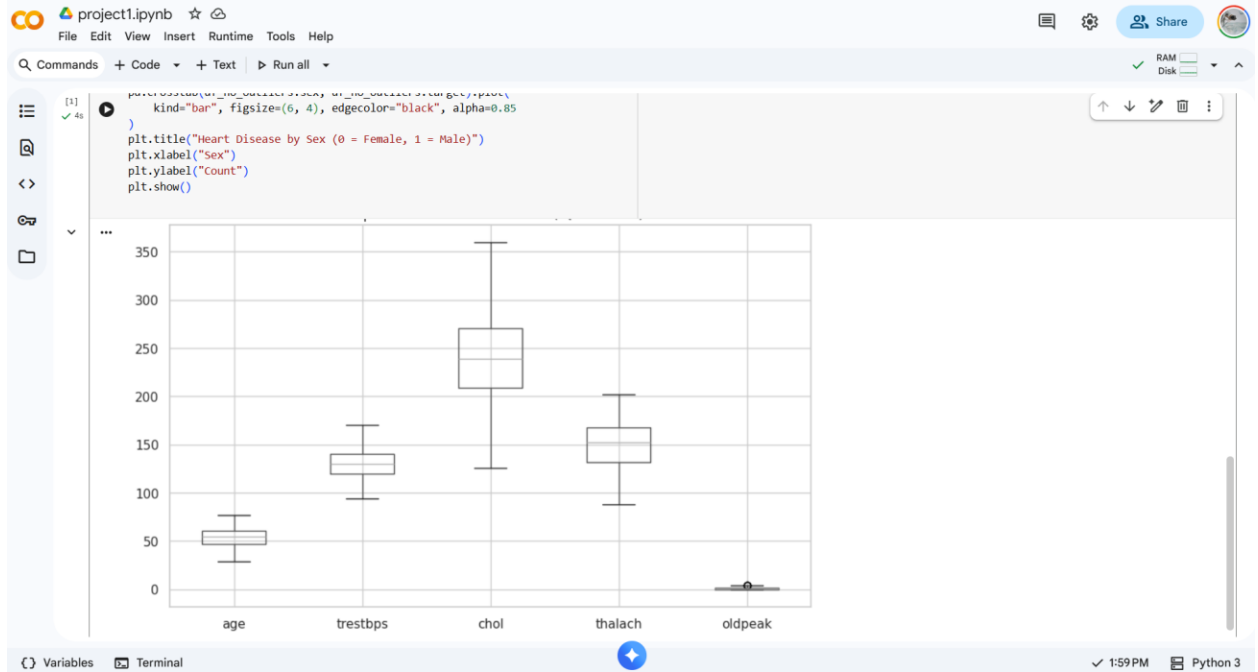
Show 10 per page 1 2 10 100 103

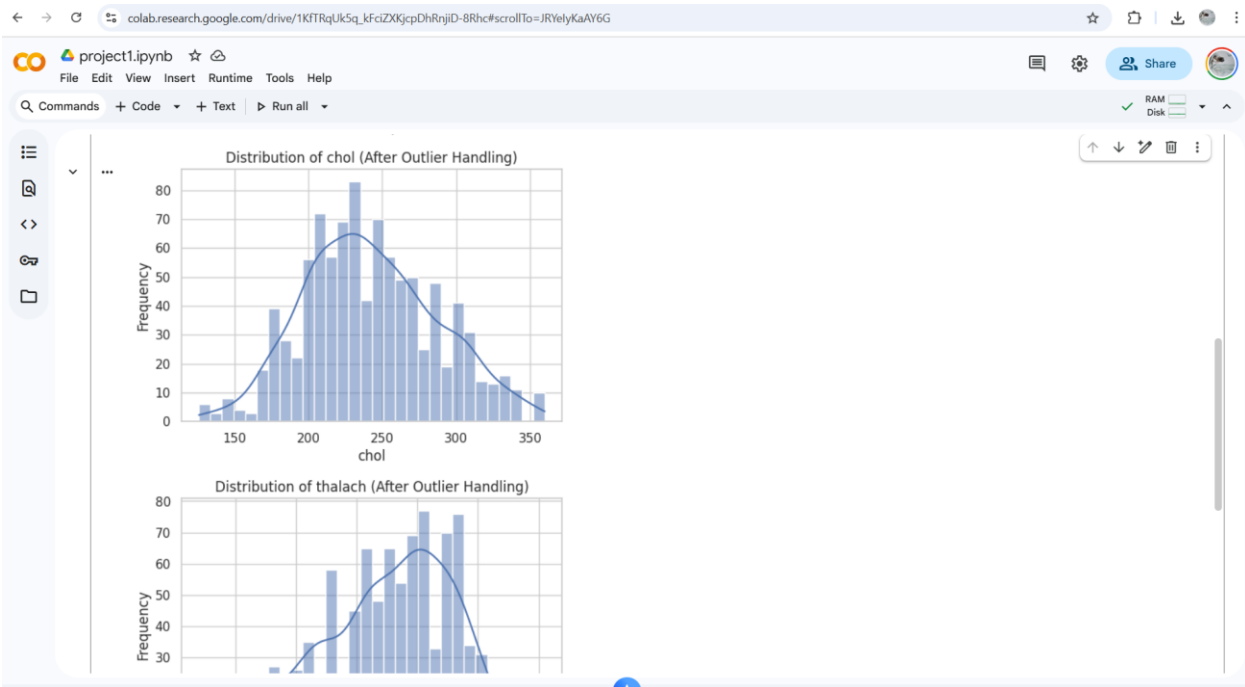
Variables

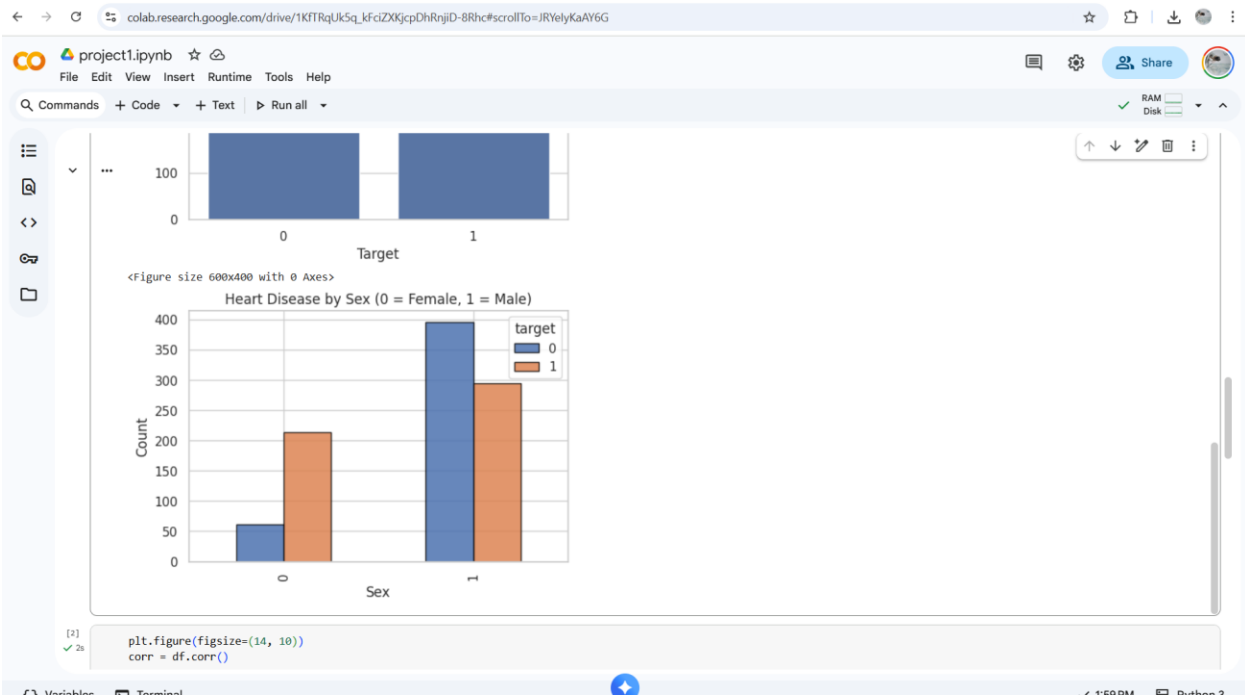
Terminal

Executing (37m 51s) Python 3









Files

- sample\_data
- heart (1) (1).csv
- heart (1) (2).csv
- heart (1).csv

Disk 69.53 GB available

```
[4] ✓ 3m
from google.colab import files
uploaded = files.upload()

Choose Files heart (1).csv
heart (1).csv(text/csv) - 38114 bytes, last modified: 11/13/2025 - 100% done
Saving heart (1).csv to heart (1) (1).csv

[10] ✓ 0s
import pandas as pd
df = pd.read_csv('heart (1).csv') # غُذِيَ الاسم حسب الملف الذي رفعتيه
df.head()
```

|   | age | sex | cp | trestbps | chol | fbs | restecg | thalach | exang | oldpeak | slope |
|---|-----|-----|----|----------|------|-----|---------|---------|-------|---------|-------|
| 0 | 52  | 1   | 0  | 125      | 212  | 0   | 1       | 168     | 0     | 1.0     | 2     |
| 1 | 53  | 1   | 0  | 140      | 203  | 1   | 0       | 155     | 1     | 3.1     | 0     |
| 2 | 70  | 1   | 0  | 145      | 174  | 0   | 1       | 125     | 1     | 2.6     | 0     |
| 3 | 61  | 1   | 0  | 148      | 203  | 0   | 1       | 161     | 0     | 0.0     | 2     |
| 4 | 62  | 0   | 0  | 138      | 294  | 1   | 1       | 106     | 0     | 1.9     | 1     |

Next steps: [Generate code with df](#) [New interactive sheet](#)

heart (1).csv

1 to 10 of 1025 entries [More tab actions](#)

| age | sex | cp | trestbps | chol | fbs | restecg | thalach | exang |
|-----|-----|----|----------|------|-----|---------|---------|-------|
| 52  | 1   | 0  | 125      | 212  | 0   | 1       | 168     | 0     |
| 53  | 1   | 0  | 140      | 203  | 1   | 0       | 155     | 1     |
| 70  | 1   | 0  | 145      | 174  | 0   | 1       | 125     | 1     |
| 61  | 1   | 0  | 148      | 203  | 0   | 1       | 161     | 0     |
| 62  | 0   | 0  | 138      | 294  | 1   | 1       | 106     | 0     |
| 58  | 0   | 0  | 100      | 248  | 0   | 0       | 122     | 0     |
| 58  | 1   | 0  | 114      | 318  | 0   | 2       | 140     | 0     |
| 55  | 1   | 0  | 160      | 289  | 0   | 0       | 145     | 1     |
| 46  | 1   | 0  | 120      | 249  | 0   | 0       | 144     | 0     |
| 54  | 1   | 0  | 122      | 286  | 0   | 0       | 116     | 1     |

Show 10 per page 1 2 10 100 103

Files

- sample\_data
- heart (1) (1).csv
- heart (1) (2).csv
- heart (1).csv

Disk 69.53 GB available

```
[11] ✓ 0s
df.columns
Index(['age', 'sex', 'cp', 'trestbps', 'chol', 'fbs', 'restecg', 'thalach', 'exang', 'oldpeak', 'slope', 'ca', 'thal', 'target'],
      dtype='object')

[12] ✓ 0s
df.isnull().sum()
```

|   | age | sex | cp | trestbps | chol | fbs | restecg | thalach | exang | oldpeak | slope | ca | thal | target |
|---|-----|-----|----|----------|------|-----|---------|---------|-------|---------|-------|----|------|--------|
| 0 | 0   | 0   | 0  | 0        | 0    | 0   | 0       | 0       | 0     | 0       | 0     | 0  | 0    | 0      |
| 1 | 0   | 0   | 0  | 0        | 0    | 0   | 0       | 0       | 0     | 0       | 0     | 0  | 0    | 0      |
| 2 | 0   | 0   | 0  | 0        | 0    | 0   | 0       | 0       | 0     | 0       | 0     | 0  | 0    | 0      |
| 3 | 0   | 0   | 0  | 0        | 0    | 0   | 0       | 0       | 0     | 0       | 0     | 0  | 0    | 0      |
| 4 | 0   | 0   | 0  | 0        | 0    | 0   | 0       | 0       | 0     | 0       | 0     | 0  | 0    | 0      |

heart (1).csv

1 to 10 of 1025 entries [Filter](#)

| age | sex | cp | trestbps | chol | fbs | restecg | thalach | exang |
|-----|-----|----|----------|------|-----|---------|---------|-------|
| 52  | 1   | 0  | 125      | 212  | 0   | 1       | 168     | 0     |
| 53  | 1   | 0  | 140      | 203  | 1   | 0       | 155     | 1     |
| 70  | 1   | 0  | 145      | 174  | 0   | 1       | 125     | 1     |
| 61  | 1   | 0  | 148      | 203  | 0   | 1       | 161     | 0     |
| 62  | 0   | 0  | 138      | 294  | 1   | 1       | 106     | 0     |
| 58  | 0   | 0  | 100      | 248  | 0   | 0       | 122     | 0     |
| 58  | 1   | 0  | 114      | 318  | 0   | 2       | 140     | 0     |
| 55  | 1   | 0  | 160      | 289  | 0   | 0       | 145     | 1     |
| 46  | 1   | 0  | 120      | 249  | 0   | 0       | 144     | 0     |
| 54  | 1   | 0  | 122      | 286  | 0   | 0       | 116     | 1     |

Show 10 per page 1 2 10 100 103