

## Code A:

```
import requests as r
import zipfile as z
import os
import pandas as pd
import pathlib as pl

script_dir = pl.Path(__file__).parent.absolute()
print(f"Script Directory: {script_dir}")
os.chdir(script_dir)

response =
r.get('https://archive.ics.uci.edu/static/public/45/heart+disease.zip',
allow_redirects=True)
print(response.status_code)
with open('_heart-disease-data.zip', 'wb') as f:
    f.write(response.content)

with z.ZipFile('_heart-disease-data.zip', 'r') as zip_ref:
    data = zip_ref.read('processed.cleveland.data').decode('utf-8')
    header =
"age,sex,cp,trestbps,chol,fbs,restecg,thalach,exang,oldpeak,slope,ca,thal,heartdi
sease"

    with open('heart-disease.csv', 'w') as f:
        f.write(header + '\n')
        f.write(data)

heart_disease = pd.read_csv('heart-disease.csv')
print(heart_disease.head())

os.remove('_heart-disease-data.zip')

with open(script_dir.parent / 'Practical 01' / 'iris.csv', 'r') as fa:
    with open('iris.csv', 'w') as fb:
        fb.write(fa.read())
    fa.seek(0)
    print(fa.readlines(128))
```

## Code B:

```
import pandas as pd
import pathlib as pl
import os

script_dir = pl.Path(__file__).parent.absolute()
print(f"Script Directory: {script_dir}")
os.chdir(script_dir)

adhyaaya = pd.read_excel('adhyaaya.xlsx')

print(f"Summary Statistics of adhyaaya dataset:\n{adhyaaya.describe()}")
print("Structure of adhyaaya dataset:")
adhyaaya.info()
print(f"Count of values in
rzp_status:\n{adhyaaya['rzp_status'].value_counts()}")
```

## Output A:

```
PS C:\DevParapalli\Projects\RTMNU-SEM-6> & "C:/Program Files/Python310/python.exe" "c:/DevParapalli/Projects/RTMNU-SEM-6/PS-II/Practical 02/a.py"
```

```
Script Directory: c:\DevParapalli\Projects\RTMNU-SEM-6\PS-II\Practical 02
```

```
200
```

	age	sex	cp	trestbps	chol	...	oldpeak	slope	ca	thal	heartdisease
0	63.0	1.0	1.0	145.0	233.0	...	2.3	3.0	0.0	6.0	0
1	67.0	1.0	4.0	160.0	286.0	...	1.5	2.0	3.0	3.0	2
2	67.0	1.0	4.0	120.0	229.0	...	2.6	2.0	2.0	7.0	1
3	37.0	1.0	3.0	130.0	250.0	...	3.5	3.0	0.0	3.0	0
4	41.0	0.0	2.0	130.0	204.0	...	1.4	1.0	0.0	3.0	0

```
[5 rows x 14 columns]
```

```
['Id,SepalLengthCm,SepalWidthCm,PetalLengthCm,PetalWidthCm,Species\n', '1,5.1,3.5,1.4,0.2,Iris-setosa\n', '2,4.9,3.0,1.4,0.2,Iris-setosa\n', '3,4.7,3.2,1.3,0.2,Iris-setosa\n']
```

## Output B:

```
& "C:/Program Files/Python310/python.exe" "c:/DevParapalli/Projects/RTMNU-SEM-6/PS-II/Practical 02/b.py"
```

```
Script Directory: c:\DevParapalli\Projects\RTMNU-SEM-6\PS-II\Practical 02
```

```
Summary Statistics of adhyaaya dataset:
```

	phone	amount
count	6.870000e+02	687.000000
mean	8.560202e+09	2565.938865
std	1.262788e+09	5615.405062
min	7.558867e+08	0.000000
25%	7.930107e+09	0.000000
50%	8.806445e+09	0.000000
75%	9.356576e+09	4900.000000
max	9.991191e+09	49900.000000

```
Structure of adhyaaya dataset:
```

```
<class 'pandas.core.frame.DataFrame'>
```

```
RangeIndex: 687 entries, 0 to 686
```

```
Data columns (total 18 columns):
```

#	Column	Non-Null Count	Dtype
0	id	687 non-null	object
1	created_at	687 non-null	object
2	name	687 non-null	object
3	phone	687 non-null	int64
4	email	687 non-null	object
5	edu_institute	687 non-null	object
6	edu_year	687 non-null	object
7	edu_spl	687 non-null	object
8	team	687 non-null	object
9	event_id	687 non-null	object
10	amount	687 non-null	int64
11	used	687 non-null	bool
12	status	687 non-null	bool
13	rzp_pid	103 non-null	object
14	rzp_oid	191 non-null	object
15	rzp_sig	103 non-null	object
16	rzp_status	687 non-null	object
17	custom	687 non-null	object

```
dtypes: bool(2), int64(2), object(14)
```

```
memory usage: 87.3+ KB
```

```
Count of values in rzp_status:
```

```
rzp_status
```

```
PAID 597
```

```
NO_PAYMENT_CREATED 90
```

```
Name: count, dtype: int64
```