```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

```
df = pd.read_csv('heart disease.csv')
```

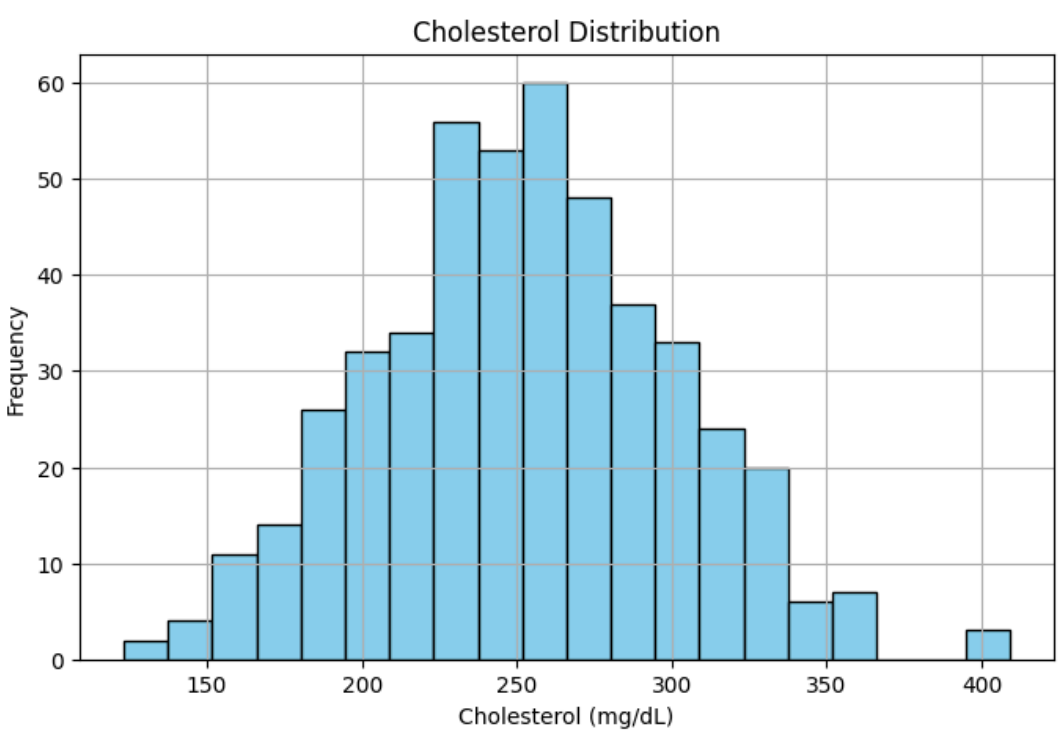
```
missing_values = df.isnull().sum()
print("Missing values in each column:\n", missing_values)
```

```
Missing values in each column:
 id               0
age              0
sex              0
cp               0
trestbps         0
chol             0
fbs              0
restecg          0
thalach          0
exang            0
oldpeak          0
slope            0
ca               0
thal             0
num              0
target_binary    0
dtype: int64
```

```
# Assuming the target column is named 'target_binary'
correlations = df.corr()['target_binary'].abs().sort_values(ascending=False)[1:4]
print("Top 3 correlations with target_binary:\n", correlations)
```

```
Top 3 correlations with target_binary:
 age   NaN
sex   NaN
cp    NaN
Name: target_binary, dtype: float64
```

```
plt.figure(figsize=(8,5))
plt.hist(df['chol'], bins=20, color='skyblue', edgecolor='black')
plt.title('Cholesterol Distribution')
plt.xlabel('Cholesterol (mg/dL)')
plt.ylabel('Frequency')
plt.grid(True)
plt.show()
```


Cholesterol Distribution
Frequency
Cholesterol (mg/dL)
0
10
20
30
40
50
60
150
200
250
300
350
400