In [1]:

```
import pandas as pd
import numpy as np
import random

# Lists of common first and last names
first_names = ['likhitha', 'Jane', 'sanju', 'chandu', 'roman', 'Olivia', 'pe
last_names = ['clevin', 'Johnson', 'raikar', 'Lee', 'Davis', 'shet', 'Anders

# Define the number of samples
num_samples = 401

# Generate random names for the dataset
names = [random.choice(first_names) + ' ' + random.choice(last_names) for _

# Create synthetic data for the dataset
np.random.seed(0)  # For reproducibility
age = np.random.randint(29, 77, num_samples)
sex = np.random.randint(0, 2, num_samples)  # 0 for female, 1 for male
chest_pain = np.random.randint(0, 4, num_samples)  # 0-3 representing differ
blood_pressure = np.random.randint(90, 200, num_samples)
cholesterol = np.random.randint(120, 320, num_samples)
blood_sugar = np.random.randint(0, 2, num_samples)  # 0 for normal, 1 for hi
ecg_results = np.random.randint(0, 3, num_samples)  # 0-2 representing diffe
heart_disease = np.random.randint(0, 2, num_samples)  # 0 for no disease, 1
# Create a DataFrame with the synthetic data and names
data = pd.DataFrame({
    'Name': names,
    'Age': age,
    'Sex': sex,
    'ChestPainType': chest_pain,
    'RestingBloodPressure': blood_pressure,
    'Cholesterol': cholesterol,
    'FastingBloodSugar': blood_sugar,
    'RestingECG': ecg_results,
    'HeartDisease': heart_disease
})

# Save the dataset to a CSV file
data.to_csv('heart_disease_dataset.csv', index=False)

print("Synthetic heart disease dataset with random names created and saved a
csv_file="heart_disease_dataset.csv"
df=pd.read_csv(csv_file)
print(df)
```

```
Synthetic heart disease dataset with random names created and saved as 'he
art_disease_dataset.csv'.
                Name  Age  Sex  ChestPainType  RestingBloodPressure  \
0        roman Clark   73    1              2                   147
1           Jane Lee   76    0              0                   107
2    likhitha clevin   29    1              3                   191
3    chandu Anderson   32    0              3                   179
4          reenu Lee   32    0              0                   175
..               ...  ...  ...            ...                   ...
396        reenu Lee   42    0              3                   109
397    chandu raikar   35    0              2                   106
398      chandu shet   67    0              1                   113
399      Ava Johnson   68    0              0                   102
400       chandu Lee   37    1              2                   189

     Cholesterol  FastingBloodSugar  RestingECG  HeartDisease
0            229                  1           2             1
1            304                  1           1             1
2            314                  0           1             0
3            140                  1           0             0
4            251                  1           1             0
..           ...                ...         ...           ...
396          135                  1           1             1
397          124                  1           2             1
398          270                  0           1             1
399          300                  0           2             0
400          186                  1           0             0

[401 rows x 9 columns]
```

In [ ]: