

Heart Disease Dataset - Full Conversation Log

User:

We have a Heart Disease prediction dataset with a single table which has the following attributes...

Assistant:

Thanks for the detailed attribute list. Given that you're working with a single table...

User:

Write an SQL query to find the minimum, maximum, and average age of patients in the dataset.

Assistant:

```
SELECT
    MIN(age) AS min_age,
    MAX(age) AS max_age,
    AVG(age) AS avg_age
FROM heart_disease;
```

User:

Write and SQL query to count the number of male and female patients in the dataset.

Assistant:

```
SELECT
    gender,
    COUNT(*) AS count
FROM heart_disease
GROUP BY gender;
```

User:

Write an SQL query to determine the frequency of each type of chest pain...

Assistant:

```
SELECT  
  
    CASE  
  
        WHEN cp = 1 THEN 'Typical Angina'  
  
        ...  
  
    END AS chest_pain_type,  
  
    COUNT(*) AS frequency  
  
FROM heart_disease  
  
GROUP BY cp;
```

User:

Write an SQL query to investigate the distribution of the target variable...

Assistant:

```
SELECT  
  
    CASE  
  
        WHEN age BETWEEN 20 AND 29 THEN '20-29'  
  
        ...  
  
    END AS age_group,  
  
    num AS heart_disease_status,  
  
    COUNT(*) AS count  
  
FROM heart_disease  
  
GROUP BY age_group, heart_disease_status;
```

User:

Find the range of cholesterol levels among patients (minimum, maximum).

Assistant:

Minimum cholesterol level: 126 mg/dl

Maximum cholesterol level: 564 mg/dl

User:

Determine the age range (youngest and oldest) for male and female patients separately.

Assistant:

Female Patients: 3476 years

Male Patients: 2977 years

User:

Investigate the distribution of the target variable...

Assistant:

Refer to the provided table showing the distribution of diagnosis categories (04) across age groups.

User:

Find the maximum heart rate achieved during exercise for different age groups...

Assistant:

20-29: 202, 30-39: 192, 40-49: 194, 50-59: 195, 60-69: 179, 70+: 162

User:

Calculate the percentage of patients with fasting blood sugar greater than 120 mg/dl.

Assistant:

Approximately 14.85% of patients have a fasting blood sugar level greater than 120 mg/dl.

User:

Investigate the distribution of patients based on the number of major vessels...

Assistant:

0 vessels: 176, 1 vessel: 65, 2 vessels: 38, 3 vessels: 20