🏥 Medical Claims Denial Rate Analysis (SQL Project)

- Objective

Analyze healthcare claims data to calculate the \*\*Claim Denial Rate\*\*, which shows what percentage of claims are denied by insurers.

-Dataset

| Column | Description |

| ClaimID | Unique claim number |

| PatientID | Unique patient code |

| Provider | Insurance provider name |

| ClaimAmount | Total billed amount |

| ClaimStatus | Approved or Denied |

| ClaimDate | Date when claim was filed |

- SQL Steps

1️⃣ Create Table

CREATE TABLE Claims (...);

**2️⃣ Insert Data**

INSERT INTO Claims VALUES (...);

**3️⃣ Calculate Denial Rate**

SELECT

ROUND(SUM(CASE WHEN ClaimStatus='Denied' THEN 1 ELSE 0 END)\*100.0 / COUNT(\*), 2) AS denial\_rate\_percent

FROM Claims;

Output → 40.00%

**- Insights**

* Denial Rate = **40%**
* Approved Claims = **60%**
* High denial rate may indicate issues in coding accuracy or payer mismatch.

**-Tools Used**

* PostgreSQL
* SQL (CASE, Aggregate Functions)
* GitHub for Version Control

**- How to Run**

1. Run create\_table.sql
2. Run insert\_data.sql
3. Execute denial\_rate\_query.sql to calculate the denial rate