

Pseudocode for Hospital Database Project

Main steps

1. Create database
2. Create tables
3. Define Primary keys and foreign keys
4. Import data from provided csv file
5. Run 6 queries listed in assessment brief
6. Copy codes and save output for submission

Database Creation

Ensure format of data = format set when creating table

1. Create table hospital
 - Using the columns from hospital.csv file
 - Set hospital id as primary as primary key
2. Create table people
 - Using columns from doctor.csv and patient .csv
 - Set id (doctor id + patient id) as Primary key
 - Set doctor id as foreign key which link back to primary key id
 - Set hospital id as foreign key
3. Create table prescription
 - Using the columns from prescription.csv
 - Set prescription id as primary key
 - Set patient id as foreign key
 - Set doctor id as foreign key

Import Provided CSV data into tables

Before loading, locate csv files

1. Load hospital.csv into Table hospital
2. Load doctor.csv into Table people
3. Load patient.csv into Table people
4. Load prescription.csv into Table prescription

Validate results after loading

- Show all columns to ensure data are loaded in the right format
- Identify incorrect format
- Identify missing IDs
- Ensure primary key and foreign key matches

Run 6 queries listed in assessment brief

1. Print a list of all doctors based at a particular hospital
 - Select all people Where

- Role = 'Doctor'
- hospital id matches chosen hospital

2. Print a list of all prescriptions for a particular patient, ordered by the prescription date

- Select prescription Where
 - patient id = chosen patient
- Order by prescription date

3. Print a list of all prescriptions that a particular doctor has prescribed

- Select prescription Where
 - Doctor id = chosen doctor

4. Add a new patient to the database, including being registered with one of the doctors

- Insert a new row into people table
 - role = 'patient'
 - doctor id = chosen doctor
- Select newly inserted role to confirm insert is completed

5. Identify which doctor has made the most prescriptions

- Count prescriptions grouped by doctor id
- Sort count descending
- Limit 1- return top doctor

6. Print a list of all doctors at the hospital with biggest size (number of beds)

- Find maximum size from hospital table
- Select doctors linked to hospital with the maximum size- link to hospital id in people table to display name