# **24CSIS03C**

**Database 1**

# The British University in Egypt - Wikipedia

**Module Leader Dr Doaa Elzanfaly**

**TA: Manar**

**Blood Bank Management System**

# Scope of the Blood Bank Management System:

# The scope of our blood bank management system is about the process of donating blood.

# Description:

The blood management system database is used to manage, store, and collect data about blood donation, inventory management, and patient data. By managing blood supply, donor data, and patient transfusion requirements, the system seeks to improve the effectiveness of blood banks, hospitals, and any organization associated with managing blood banks. The Blood Bank entity is at the centre of this system, managing all aspects of operations, including donor relations and blood product inventory. Essential details about each blood donor are recorded in the Donor table, and each donation event is linked to the appropriate donor in the Donation table. Through the Blood Inventory, which keeps track of available types and amounts of blood, these donations help the blood bank effectively meet hospital demands. The Storage Facility table lists blood locations and storage conditions, which are essential for preserving the blood products' quality. The Blood Request entity, which monitors requests for blood kinds and volumes, is another way that the system links hospitals to blood supply needs. Furthermore, the Patient and Transfusion Event tables provide accurate tracking of patients requiring transfusions by recording their transfusion history and related blood types. To ascertain donor eligibility and guarantee the security of blood transfusions, the Medical History table is essential, while the Employee table keeps track of staff who work on the operations. All of these elements work together to create a thorough framework that improves coordination and communication, which eventually leads to better patient outcomes and increased operational effectiveness throughout the blood bank system. The approach aims to maintain the highest standards of safety and quality in blood transfusions while also streamlining operational procedures by combining data from each of these entities.

**Tables:**

# Donor

# Donation

# Blood Bank

# Blood Inventory

# Storage Facility

# Hospital

# Patient History

# Donor history

# Employee

# Patient

# Transfusion Event

# Blood Request

# Makes (Junction table)

# Phone numbers

# Nurse

# Doctor

**Subclasess:**

1. **Disjoint from Medical History:**
2. Patient\_History
3. **Donor\_History:** Last\_Donation\_Date (DATE)
4. **Disjoint from Employee:**
5. **IT\_Support\_Specialist:** Technical\_Proficiency (VARCHAR)
6. **Nurse:** Certification\_Type (VARCHAR)
7. **Doctor:** Specialisation (VARCHAR)
8. **Secretary:** Typing\_Speed (VARCHAR)
9. **Disjoint from Employee:**
10. **Salaried\_Emp:** Salary (DECIMAL)
11. **Hourly\_Emp:** Pay\_Scale (DECIMAL)

# Relations:

# Donor and donation:M-N

# Many donors can make many donations.

# Blood bank and donation: 1-N

# The blood bank can receive multiple donations, and each donation record is linked to one specific blood bank. The relation is obligatory from both sides.

# Storage facility and Blood inventory: 1-N

# Each storage facility contains many blood inventories, and many inventories are stored in one facility. The relation is mandatory from the blood inventory side.

# Blood inventory and Donation: 1-N

# Each inventory contains many blood donations, and many donations are stored in one inventory. The relation is mandatory from the blood inventory side as blood donations can be only stored in inventories.

# Blood Bank and Hospital: 1-N

# Our blood bank system cooperates with many hospitals, and many hospitals work with our blood bank. The relation is mandatory from the hospital side.

# Donor history and Donor: 1 - 1

# One donor has only one corresponding record in the donor history table, and each donation history is only associated with one donor. The relation is mandatory from both sides.

# Patient and Patient history: 1 - 1

# Each patient is associated with one single record in the patient history table and vice versa. The relation is mandatory from both sides.

# Patient and Transfusion event: 1-N

# One patient can have multiple transfusion events, and each transfusion can is associated with only one patient. The relation is mandatory form the transfusion event.

# Patient and Blood request

# Each patient can have multiple requests for blood, and one blood request is only directed to one patient.

# Patient 1🡪N Blood request

# Blood Request 1🡪1 Patient

# Therefore, the final relation is 1-N.

# It is mandatory for both sides.

# Blood bank and Patient: 1-N

# The blood bank provides blood units to multiple patients, and many patients get blood units from our blood bank. The relation is mandatory from the patient side.

# Blood bank and Employee:1-N

# The blood bank has many employees, and employees work only in the blood bank. The relationship is mandatory for both sides.

# Functionalities:

# Managing the blood inventory:

# Showing the current stock of each blood type with its storing date to ensure it’s not expired.

# Extracting the blood units that are about to expire to prioritize the usage.

# Managing the Donations and Donors Data:

# Viewing the history for a specific donor, helping track frequency and quantity of donations.

# Extracting the donors eligible for new donations based on last donation date.

# Medical and Compliance Functions:

# Generating a report for the patient’s medical history and provide insights into past treatments and conditions.

# Monitoring the most demanded blood types by tracking requests over the past month will help in planning for future inventory needs.

# Employee and Facility Management:

# Providing a history of transfusions performed by a specific employee, useful for performance tracking.

# Compares current inventory levels to storage facility capacity, ensuring facilities are not overstocked.

# Find Donors with Rare Blood Types:

# Identifying donors with rare blood types will maintain adequate inventory of high-demand and scarce blood types.

# Request and Supply Chain Management:

# Analysing Blood Requests by Hospital by tracking requested volume from each hospital by blood type and identifying high-demand facilities for better supply planning.

# Detailed Donor Engagement Analysis:

# Showing the total number of donations and volume for each donor helps recognizing high-contributing donors.

# EERD:

# 

# P.S. Zoom in for better view

# Final Schema:

# 

# 

# P.S. Zoom in for better view

# SQL Code:

# CREATE DATABASE Blood\_Bank\_Management\_4;

# /\*omayr ali 242994\*/

# CREATE TABLE Blood\_Bank (

# ID INT,

# Bank\_Name VARCHAR(50) NOT NULL,

# Email VARCHAR(50),

# City VARCHAR(20),

# Street VARCHAR(50),

# Postal\_Code VARCHAR(10),

# Working\_Hours VARCHAR(10),

# Contact\_Number VARCHAR(20) NOT NULL,

# CONSTRAINT bank\_pk PRIMARY KEY (ID)

# );

# /\*omayr ali 242994\*/

# /\*ebrahim gamal 241939\*/

# CREATE TABLE Storage\_Facility (

# Storage\_ID INT NOT NULL,

# Facility\_Type VARCHAR(80),

# Capacity DECIMAL,

# Working\_hours VARCHAR(60),

# City VARCHAR(40),

# Street VARCHAR(40),

# Postal\_Code VARCHAR(100),

# CONSTRAINT Storage\_Facility\_PK PRIMARY KEY (Storage\_ID)

# );

# /\*ebrahim gamal 241939\*/

# /\*sohaila taher\*/

# CREATE TABLE Donor (

# Donor\_ID INT,

# Fname VARCHAR(20),

# M\_int VARCHAR(20),

# Lname VARCHAR(20),

# Address VARCHAR(100),

# Contact\_Info VARCHAR(100),

# Height DECIMAL,

# Date\_of\_Birth DATE,

# Weight DECIMAL,

# Blood\_Type CHAR(3),

# CONSTRAINT Donor\_pk PRIMARY KEY (Donor\_ID)

# );

# /\*sohaila taher\*/

# /\*sohaila taher 245365\*/

# CREATE TABLE Donor\_History (

# File\_Number VARCHAR(50),

# Phone\_Number VARCHAR(50),

# Gender CHAR(1),

# Date\_of\_Birth DATE,

# Fname VARCHAR(50),

# M\_int VARCHAR(50),

# Lname VARCHAR(50),

# Last\_Donation\_Date DATE,

# Donor\_ID INT,

# CONSTRAINT Donor\_History\_pk PRIMARY KEY (File\_Number),

# CONSTRAINT History\_Donor FOREIGN KEY (Donor\_ID) REFERENCES Donor(Donor\_ID)

# ON UPDATE CASCADE

# ON DELETE SET NULL

# );

# /\*sohaila taher 245365\*/

# /\*shahd osama 247915\*/

# CREATE TABLE Employee (

# Fname VARCHAR(20) NOT NULL,

# Minit CHAR(10),

# Lname VARCHAR(20) NOT NULL,

# Ssn INT NOT NULL,

# BOD DATE,

# City VARCHAR(20) NOT NULL,

# Street VARCHAR(20) NOT NULL,

# Zip\_code INT,

# Gender CHAR(1),

# Blood\_Bank\_ID INT,

# CONSTRAINT emp\_pk PRIMARY KEY (Ssn),

# CONSTRAINT BloodBank\_Emp FOREIGN KEY (Blood\_Bank\_ID) REFERENCES Blood\_Bank(ID)

# );

# CREATE TABLE Nurse (

# Ssn INT NOT NULL,

# Certification\_type VARCHAR(35) NOT NULL,

# CONSTRAINT Nurse\_pk PRIMARY KEY (Ssn),

# CONSTRAINT Emp\_Nurse FOREIGN KEY (Ssn) REFERENCES Employee(Ssn)

# );

# CREATE TABLE Doctor (

# Ssn INT NOT NULL,

# Specialization VARCHAR(35) NOT NULL,

# CONSTRAINT Doctor\_pk PRIMARY KEY (Ssn),

# CONSTRAINT Emp\_Doctor FOREIGN KEY (Ssn) REFERENCES Employee(Ssn)

# );

# CREATE TABLE Hospital (

# Hospital\_id INT NOT NULL,

# Name VARCHAR(35) NOT NULL,

# City VARCHAR(20) NOT NULL,

# Street VARCHAR(20) NOT NULL,

# Zip\_code INT,

# Hotline INT NOT NULL,

# Email VARCHAR(100),

# Quantity\_supplied INT,

# Blood\_Bank\_ID INT,

# CONSTRAINT Hospital\_pk PRIMARY KEY (Hospital\_ID),

# CONSTRAINT Hosp\_Bank FOREIGN KEY (Blood\_Bank\_ID) REFERENCES Blood\_Bank(ID)

# );

# /\*shahd osama 247915\*/

# /\*omayr ali 242994\*/

# CREATE TABLE Blood\_Inventory (

# Inv\_ID INT,

# Stored\_Blood\_Quantity DECIMAL NOT NULL,

# Date\_Stored DATE,

# Validity\_Period INT NOT NULL, -- days

# Storage\_Temperature VARCHAR(10),

# Storage\_ID INT,

# CONSTRAINT inv\_pk PRIMARY KEY (Inv\_ID),

# CONSTRAINT inv\_storage\_fk FOREIGN KEY (Storage\_ID) REFERENCES Storage\_Facility(Storage\_ID)

# ON UPDATE CASCADE

# );

# /\*omayr ali 242994\*/

# /\*abdelrahman shehta 243700\*/

# CREATE TABLE Patient (

# Medical\_Record\_Num INT NOT NULL,

# Fname VARCHAR(20) NOT NULL,

# Mint VARCHAR(20) NOT NULL,

# Lname VARCHAR(20) NOT NULL,

# DOB DATE,

# Gender CHAR(1),

# Address VARCHAR(300),

# Blood\_type CHAR(3),

# Blood\_Bank\_ID INT,

# CONSTRAINT Pat\_pk PRIMARY KEY (Medical\_Record\_Num),

# CONSTRAINT pat\_fk1 FOREIGN KEY (Blood\_Bank\_ID) REFERENCES Blood\_Bank(ID)

# ON UPDATE CASCADE

# ON DELETE SET NULL

# );

# /\*abdelrahman shehta 243700\*/

# /\*sohaila taher\*/

# CREATE TABLE Patient\_History (

# File\_Number VARCHAR(30),

# Phone\_Number VARCHAR(30),

# Gender CHAR(1),

# Date\_of\_Birth DATE,

# Fname VARCHAR(30),

# M\_int VARCHAR(30),

# Lname VARCHAR(30),

# Admission\_Date DATE,

# Diagnosis VARCHAR(30),

# Medical\_Record\_Number INT,

# CONSTRAINT Patient\_History\_pk PRIMARY KEY (File\_Number),

# CONSTRAINT History\_Patient FOREIGN KEY (Medical\_Record\_Number) REFERENCES Patient(Medical\_Record\_Num)

# );

# /\*sohaila taher\*/

# /\*omayr ali 242994\*/

# CREATE TABLE Blood\_Request (

# Request\_ID INT,

# Requested\_Volume DECIMAL NOT NULL, -- litres

# Blood\_Type CHAR(3) NOT NULL,

# Request\_Date DATE,

# Fulfillment\_Date DATE,

# Req\_Status VARCHAR(15), -- Pending - Fulfilled

# MR\_Num INT,

# CONSTRAINT req\_pk PRIMARY KEY (Request\_ID),

# CONSTRAINT req\_patient\_fk FOREIGN KEY (MR\_Num) REFERENCES Patient(Medical\_Record\_Num)

# ON UPDATE CASCADE

# ON DELETE SET NULL

# );

# /\*omayr ali 242994\*/

# /\*ebrahim gamal 241939\*/

# CREATE TABLE Transfusion\_Event (

# Transfusion\_ID INT NOT NULL,

# Transfusion\_Date DATE,

# Volume\_Transfered\_litres DECIMAL,

# Doctor\_in\_Charge VARCHAR(50),

# Post\_Trans\_Notes VARCHAR(500),

# Medical\_Record\_Num INT NOT NULL,

# CONSTRAINT Trans\_Event\_Pk PRIMARY KEY (Transfusion\_ID),

# CONSTRAINT Trans\_Event\_FK FOREIGN KEY (Medical\_Record\_Num) REFERENCES Patient(Medical\_Record\_Num)

# ON UPDATE CASCADE

# );

# /\*ebrahim gamal 241939\*/

# /\*abdelrahman shehta 243700\*/

# CREATE TABLE Donation (

# Donation\_ID INT NOT NULL,

# Volume\_Donated DECIMAL,

# Blood\_Type CHAR(3),

# Health\_Status VARCHAR(30),

# Expiry\_Date DATE,

# Donation\_Date DATE,

# Blood\_Bank\_ID INT,

# Inv\_ID INT,

# CONSTRAINT Don\_pk PRIMARY KEY (Donation\_ID),

# CONSTRAINT don\_fk1 FOREIGN KEY (Blood\_Bank\_ID) REFERENCES Blood\_Bank(ID),

# CONSTRAINT don\_fk2 FOREIGN KEY (Inv\_ID) REFERENCES Blood\_Inventory(Inv\_ID)

# );

# CREATE TABLE Phone\_numbers (

# MR\_Num INT,

# Phone\_Number VARCHAR(30),

# CONSTRAINT Phone\_pk PRIMARY KEY (Phone\_Number),

# CONSTRAINT Phone\_fk FOREIGN KEY (MR\_Num) REFERENCES Patient(Medical\_Record\_Num)

# );

# /\*abdelrahman shehta 243700\*/

# /\*ebrahim gamal 241939\*/

# CREATE TABLE Makes (

# Donor\_ID INT,

# Donation\_ID INT,

# CONSTRAINT Makes\_pk PRIMARY KEY (Donor\_ID, Donation\_ID),

# CONSTRAINT Makes\_fk1 FOREIGN KEY (Donor\_ID) REFERENCES Donor(Donor\_ID),

# CONSTRAINT Makes\_fk2 FOREIGN KEY (Donation\_ID) REFERENCES Donation(Donation\_ID)

# );

# /\*ebrahim gamal 241939\*/

# ALTER TABLE Employee

# ADD IsMarried CHAR;

# ALTER TABLE Employee

# DROP COLUMN IsMarried;

# INSERT INTO Blood\_Bank

# VALUES

# (10001, 'Central Blood Bank', 'central@bloodbank.com', 'Cairo', 'Nasr City St.', '12345', '9AM-5PM', '+201001234567'),

# (10002, 'Alex Blood Bank', 'alex@bloodbank.com', 'Alexandria', 'Corniche Rd.', '54321', '8AM-4PM', '+201142345678'),

# (10003, 'Delta Blood Bank', 'delta@bloodbank.com', 'Tanta', 'Al Gharbeya St.', '67890', '10AM-6PM', '+201203456789'),

# (10004, 'Aswan Blood Bank', 'aswan@bloodbank.com', 'Aswan', 'Nile Corniche', '13579', '7AM-3PM', '+201004567890'),

# (10005, 'Giza Blood Bank', 'giza@bloodbank.com', 'Giza', 'Pyramids Rd.', '24680', '11AM-7PM', '+201105678901'),

# (10006, 'Port Said Blood Bank', 'portsaidbank@gmail.com', 'Port Said', 'Freedom Rd.', '11111', '8AM-4PM', '+201011234567'),

# (10007, 'Mansoura Blood Bank', 'mansourabank@outlook.com', 'Mansoura', 'University St.', '22222', '7AM-3PM', '+201022345678'),

# (10008, 'Suez Blood Bank', 'suezbank@gmail.com', 'Suez', 'Port Rd.', '33333', '10AM-6PM', '+201033456789'),

# (10009, 'Fayoum Blood Bank', 'fayoumbank@gmail.com', 'Fayoum', 'Lake Rd.', '44444', '9AM-5PM', '+201044567890'),

# (10010, 'Beni Suef Blood Bank', 'benisuefbank@outlook.com', 'Beni Suef', 'Pyramids Rd.', '55555', '8AM-4PM', '+201055678901'),

# (10011, 'Zagazig Blood Bank', 'zagazigbank@gmail.com', 'Zagazig', 'Al Mansoura St.', '66666', '7AM-3PM', '+201066789012'),

# (10012, 'Minya Blood Bank', 'minyabank@outlook.com', 'Minya', 'Corniche St.', '77777', '10AM-6PM', '+201077890123'),

# (10013, 'Qena Blood Bank', 'qenabank@gmail.com', 'Qena', 'Luxor Rd.', '88888', '8AM-4PM', '+201088901234'),

# (10014, 'Sohag Blood Bank', 'sohagbank@outlook.com', 'Sohag', 'Al Mahatta Rd.', '99999', '9AM-5PM', '+201099012345'),

# (10015, 'Ismailia Blood Bank', 'ismailiabank@gmail.com', 'Ismailia', 'Suez Canal Rd.', '11223', '7AM-3PM', '+201011112222'),

# (10016, 'Damietta Blood Bank', 'damiettbank@outlook.com', 'Damietta', 'Corniche Rd.', '22112', '8AM-4PM', '+201022223333'),

# (10017, 'Luxor Blood Bank', 'luxorbank@gmail.com', 'Luxor', 'Pharaoh St.', '33445', '10AM-6PM', '+201033334444'),

# (10018, 'Asyut Blood Bank', 'asyutbank@outlook.com', 'Asyut', 'Nile Rd.', '55678', '9AM-5PM', '+201044445555'),

# (10019, 'Sharm Blood Bank', 'sharmbank@gmail.com', 'Sharm El-Sheikh', 'Tourist Rd.', '66789', '8AM-4PM', '+201055556666'),

# (10020, 'Hurghada Blood Bank', 'hurghadabank@outlook.com', 'Hurghada', 'Red Sea Rd.', '77890', '7AM-3PM', '+201066667777'),

# (10021, 'Tanta Blood Bank', 'tantabank@gmail.com', 'Tanta', 'Al Gharbeya Rd.', '88901', '9AM-5PM', '+201077778888'),

# (10022, 'Banha Blood Bank', 'banhabank@outlook.com', 'Banha', 'Delta Rd.', '99012', '10AM-6PM', '+201088889999'),

# (10023, 'Matruh Blood Bank', 'matruhbank@gmail.com', 'Matruh', 'Coast Rd.', '10101', '8AM-4PM', '+201099990000'),

# (10024, 'New Valley Blood Bank', 'newvalleybank@outlook.com', 'New Valley', 'Desert Rd.', '12321', '9AM-5PM', '+201011001122'),

# (10025, 'North Sinai Blood Bank', 'northsinaibank@gmail.com', 'North Sinai', 'Arish Rd.', '14141', '7AM-3PM', '+201022112233');

# INSERT INTO Storage\_Facility VALUES

# (1, 'Hospital Storage', 500.0, '8:00 AM - 8:00 PM', 'Cairo', 'Tahrir Street', '11511'),

# (2, 'Blood Bank', 1000.0, '24/7', 'Alexandria', 'Corniche Road', '21523'),

# (3, 'Medical Center Storage', 300.0, '9:00 AM - 5:00 PM', 'Giza', 'Pyramids Avenue', '12512'),

# (4, 'Emergency Storage', 200.0, '24/7', 'Aswan', 'Nile Street', '81111'),

# (5, 'Hospital Storage', 750.0, '7:00 AM - 7:00 PM', 'Mansoura', 'Port Said Street', '35516'),

# (6, 'Clinic Storage', 150.0, '9:00 AM - 3:00 PM', 'Suez', 'Victory Road', '43515'),

# (7, 'Blood Donation Center', 600.0, '8:00 AM - 6:00 PM', 'Tanta', 'Saad Zaghloul Street', '31512'),

# (8, 'Hospital Storage', 900.0, '6:00 AM - 10:00 PM', 'Zagazig', 'Mahmoud Fawzy Street', '44511'),

# (9, 'Blood Bank', 1200.0, '24/7', 'Fayoum', 'Republic Street', '63512'),

# (10, 'Mobile Storage Unit', 100.0, 'Variable', 'Port Said', 'Canal Avenue', '42511'),

# (11, 'Emergency Storage', 250.0, '24/7', 'Ismailia', 'Suez Canal Street', '41515'),

# (12, 'Hospital Storage', 800.0, '7:00 AM - 9:00 PM', 'Luxor', 'Ramses Street', '85111'),

# (13, 'Medical Center Storage', 350.0, '9:00 AM - 4:00 PM', 'Qena', 'Victory Street', '86115'),

# (14, 'Clinic Storage', 200.0, '8:00 AM - 3:00 PM', 'Asyut', 'Freedom Avenue', '71111'),

# (15, 'Blood Bank', 1300.0, '24/7', 'Sharm El-Sheikh', 'Peace Road', '46512'),

# (16, 'Hospital Storage', 600.0, '6:00 AM - 8:00 PM', 'Dahab', 'Coastal Road', '46517'),

# (17, 'Clinic Storage', 150.0, '9:00 AM - 5:00 PM', 'Qualiub', 'Nasser Street', '61112'),

# (18, 'Medical Center Storage', 400.0, '7:00 AM - 6:00 PM', 'Beni Suef', 'Salah Salem Street', '62111'),

# (19, 'Hospital Storage', 700.0, '7:00 AM - 9:00 PM', 'Hurghada', 'Touristic Road', '84511'),

# (20, 'Emergency Storage', 300.0, '24/7', 'Sohag', 'King Faisal Road', '82515'),

# (21, 'Blood Donation Center', 500.0, '8:00 AM - 5:00 PM', 'New Valley', 'Desert Road', '72511'),

# (22, 'Hospital Storage', 850.0, '6:00 AM - 8:00 PM', 'Kafr El Sheikh', 'Al Qanater Street', '33511'),

# (23, 'Clinic Storage', 100.0, '9:00 AM - 3:00 PM', 'Matrouh', 'Military Road', '51512'),

# (24, 'Blood Bank', 1400.0, '24/7', 'Arish', 'El Salam Street', '45511'),

# (25, 'Mobile Storage Unit', 120.0, 'Variable', 'North Coast', 'Coastal Road', '50517');

# INSERT INTO Donor VALUES

# (1, 'Ahmed', 'M.', 'Ali', 'Cairo, Egypt', '01012345678', 1.75, '1990-01-15', 70, 'A+'),

# (2, 'Fatima', 'A.', 'Hassan', 'Giza, Egypt', '01023456789', 1.65, '1985-03-22', 60, 'B+'),

# (3, 'Mohamed', 'S.', 'Khaled', 'Alexandria, Egypt', '01034567890', 1.80, '1992-07-10', 80, 'O-'),

# (4, 'Sara', 'H.', 'Ibrahim', 'Aswan, Egypt', '01045678901', 1.70, '1988-11-03', 55, 'AB+'),

# (5, 'Omar', 'R.', 'El-Masry', 'Luxor, Egypt', '01056789012', 1.82, '1995-06-27', 75, 'A-'),

# (6, 'Layla', 'R.', 'Badawy', 'Mansoura, Egypt', '01067890123', 1.60, '1993-02-14', 54, 'B-'),

# (7, 'Youssef', 'A.', 'Salah', 'Suez, Egypt', '01078901234', 1.78, '1987-09-20', 72, 'O+'),

# (8, 'Nura', 'T.', 'Hossam', 'Port Said, Egypt', '01089012345', 1.65, '1990-12-10', 68, 'AB-'),

# (9, 'Karim', 'M.', 'Fouad', 'Tanta, Egypt', '01090123456', 1.77, '1991-04-06', 78, 'A+'),

# (10, 'Amina', 'K.', 'Gamal', 'Damanhour, Egypt', '01001234567', 1.67, '1989-05-05', 59, 'B+'),

# (11, 'Walid', 'Q.', 'Ayman', 'Ismailia, Egypt', '01123456789', 1.83, '1985-08-19', 85, 'O-'),

# (12, 'Huda', 'B.', 'Mustafa', 'El-Mahalla El-Kubra, Egypt', '01134567890', 1.60, '1983-01-30', 50, 'AB+'),

# (13, 'Nabil', 'F.', 'Samir', 'Sharm El-Sheikh, Egypt', '01145678901', 1.79, '1994-07-25', 88, 'A-'),

# (14, 'Dalia', 'H.', 'Said', 'Hurghada, Egypt', '01156789012', 1.66, '1982-11-11', 65, 'B-'),

# (15, 'Sami', 'E.', 'Zaki', '6th of October City, Egypt', '01167890123', 1.81, '1986-06-18', 80, 'O+'),

# (16, 'Maya', 'L.', 'Nasser', 'Faiyum, Egypt', '01178901234', 1.62, '1992-10-02', 57, 'AB-'),

# (17, 'Ibrahim', 'H.', 'Haidar', 'Zagazig, Egypt', '01189012345', 1.73, '1988-03-15', 74, 'A+'),

# (18, 'Yasmin', 'M.', 'Salem', 'Marsa Matrouh, Egypt', '01190123456', 1.74, '1995-04-11', 62, 'B+'),

# (19, 'Fares', 'A.', 'Khalaf', 'Beni Suef, Egypt', '01212345678', 1.76, '1991-05-29', 70, 'O-'),

# (20, 'Nadia', 'A.', 'Farag', 'Cairo, Egypt', '01223456789', 1.58, '1987-08-08', 55, 'AB+'),

# (21, 'Rami', 'Q.', 'Shams', 'Suez, Egypt', '01234567890', 1.77, '1990-02-24', 76, 'A-'),

# (22, 'Salma', 'E.', 'Salah', 'Asyut, Egypt', '01245678901', 1.63, '1985-12-30', 58, 'B-'),

# (23, 'Ali', 'N.', 'Said', 'Mansoura, Egypt', '01256789012', 1.80, '1993-06-15', 85, 'O+'),

# (24, 'Hana', 'P.', 'Abdelaziz', 'El Minya, Egypt', '01267890123', 1.65, '1990-07-07', 61, 'AB-'),

# (25, 'Zain', 'T.', 'Sultan', 'Kafr El-Sheikh, Egypt', '01278901234', 1.82, '1992-05-19', 74, 'A+');

# INSERT INTO Donor\_History (File\_Number, Phone\_Number, Gender, Date\_of\_Birth, Fname, M\_int, Lname, Last\_Donation\_Date, Donor\_ID) VALUES

# ('FN001', '01012345678', 'M', '1990-01-15', 'Ahmed', 'M.', 'Ali', '2023-01-10', 1),

# ('FN002', '01023456789', 'F', '1985-03-22', 'Fatima', 'A.', 'Hassan', '2022-12-05', 2),

# ('FN003', '01034567890', 'M', '1992-07-10', 'Mohamed', 'S.', 'Khaled', '2023-02-15', 3),

# ('FN004', '01045678901', 'F', '1988-11-03', 'Sara', 'H.', 'Ibrahim', '2021-09-22', 4),

# ('FN005', '01056789012', 'M', '1995-06-27', 'Omar', NULL, 'El-Masry', '2023-03-20', 5),

# ('FN006', '01067890123', 'F', '1993-02-14', 'Layla', 'R.', 'Badawy', '2023-03-01', 6),

# ('FN007', '01078901234', 'M', '1987-09-20', 'Youssef', 'A.', 'Salah', '2022-11-11', 7),

# ('FN008', '01089012345', 'F', '1990-12-10', 'Nura', 'T.', 'Hossam', '2023-01-25', 8),

# ('FN009', '01090123456', 'M', '1991-04-06', 'Karim', 'M.', 'Fouad', '2022-10-15', 9),

# ('FN010', '01001234567', 'F', '1989-05-05', 'Amina', 'K.', 'Gamal', '2023-02-28', 10),

# ('FN011', '01123456789', 'M', '1985-08-19', 'Walid', 'Q.', 'Ayman', '2022-10-05', 11),

# ('FN012', '01134567890', 'F', '1983-01-30', 'Huda', NULL, 'Mustafa', '2023-04-10', 12),

# ('FN013', '01145678901', 'M', '1994-07-25', 'Nabil', 'F.', 'Samir', '2023-03-30', 13),

# ('FN014', '01156789012', 'F', '1982-11-11', 'Dalia', 'H.', 'Said', '2023-01-15', 14),

# ('FN015', '01167890123', 'M', '1986-06-18', 'Sami', 'E.', 'Zaki', '2021-12-20', 15),

# ('FN016', '01178901234', 'F', '1992-10-02', 'Maya', NULL, 'Nasser', '2023-03-05', 16),

# ('FN017', '01189012345', 'M', '1988-03-15', 'Ibrahim', 'H.', 'Haidar', '2022-08-12', 17),

# ('FN018', '01190123456', 'F', '1995-04-11', 'Yasmin', 'M.', 'Salem', '2022-09-25', 18),

# ('FN019', '01212345678', 'M', '1991-05-29', 'Fares', 'A.', 'Khalaf', '2023-02-10', 19),

# ('FN020', '01223456789', 'F', '1987-08-08', 'Nadia', NULL, 'Farag', '2023-01-20', 20),

# ('FN021', '01234567890', 'M', '1990-02-24', 'Rami', 'Q.', 'Shams', '2023-03-15', 21),

# ('FN022', '01245678901', 'F', '1985-12-30', 'Salma', 'E.', 'Salah', '2023-01-05', 22),

# ('FN023', '01256789012', 'M', '1993-06-15', 'Ali', 'N.', 'Said', '2023-02-18', 23),

# ('FN024', '01267890123', 'F', '1990-07-07', 'Hana', NULL, 'Abdelaziz', '2023-01-28', 24),

# ('FN025', '01278901234', 'M', '1992-05-19', 'Zain', 'T.', 'Sultan', '2022-12-15', 25);

# INSERT INTO Employee

# VALUES

# ('Ahmed', 'A', 'Ali', 101, '1980-05-15', 'Cairo', 'Tahrir Square', 11511, 'M', 10001),

# ('Fatima', 'B', 'El-Sayed', 102, '1985-08-20', 'Alexandria', 'Corniche St', 21511, 'F', 10002),

# ('Mona', 'C', 'Hassan', 103, '1990-11-10', 'Giza', 'Pyramids Road', 12511, 'F', 10003),

# ('Mohamed', 'D', 'Hassan', 104, '1975-02-25', 'Cairo', 'Mohamed Mahmoud St', 11611, 'M', 10004),

# ('Nadia', 'E', 'Khaled', 105, '1992-06-05', 'Sharm El Sheikh', 'Naama Bay', 46619, 'F', 10005),

# ('Mahmoud', 'F', 'Ibrahim', 106, '1983-07-30', 'Tanta', 'Mohamed Farid St', 31511, 'M', 10006),

# ('Sara', 'G', 'Mansour', 107, '1987-03-25', 'Aswan', 'Nile Corniche', 81511, 'F', 10007),

# ('Omar', 'H', 'Farouk', 108, '1991-12-12', 'Port Said', 'Port Said St', 42511, 'M', 10008),

# ('Rania', 'I', 'El-Masry', 109, '1995-01-15', 'Hurghada', 'Sheraton Road', 84511, 'F', 10009),

# ('Youssef', 'J', 'Mahmoud', 110, '1988-09-10', 'Suez', 'Suez Canal St', 43511, 'M', 10010),

# ('Nour', 'K', 'Gamal', 111, '1993-05-22', 'Mansoura', 'El-Mansoura St', 35511, 'F', 10011),

# ('Tamer', 'L', 'Abdelaziz', 112, '1970-04-04', 'Cairo', 'El-Mosheer St', 11622, 'M', 10012),

# ('Lina', 'M', 'Shoukry', 113, '1990-07-19', 'Luxor', 'Corniche El-Nil', 85911, 'F', 10013),

# ('Karim', 'N', 'Salah', 114, '1986-10-25', 'Alexandria', 'Raml Station', 21515, 'M', 10014),

# ('Dina', 'O', 'Zaki', 115, '1998-04-10', 'Fayoum', 'Shakshouk Street', 63511, 'F', 10015),

# ('Ehab', 'P', 'Samy', 116, '1994-01-30', 'Sohag', 'El-Sharafa St', 83511, 'M', 10016),

# ('Hala', 'Q', 'Salem', 117, '1981-02-12', 'Marsa Matrouh', 'Marsa Matrouh Rd', 51711, 'F', 10017),

# ('Ibrahim', 'R', 'Farag', 118, '1989-11-01', 'Zagazig', 'El-Sa’adah St', 44511, 'M', 10018),

# ('Ghada', 'S', 'Fathy', 119, '1996-08-30', 'Marsa Alam', 'Marsa Alam St', 45511, 'F', 10019),

# ('Khaled', 'T', 'Abdelrahman', 120, '1982-03-05', 'Minya', 'Hussein St', 62111, 'M', 10020),

# ('Layla', 'U', 'Nabil', 121, '1997-07-23', 'Damietta', 'Damietta Rd', 56611, 'F', 10021),

# ('Hossam', 'V', 'Youssef', 122, '1984-09-18', 'Cairo', 'Tahrir Square', 11514, 'M', 10022),

# ('Mariam', 'W', 'Gabr', 123, '1999-02-03', 'Damanhour', 'Shahrour St', 52511, 'F', 10023),

# ('Sherif', 'X', 'Kassem', 124, '1980-11-28', 'Assiut', 'El-Mohafza St', 71511, 'M', 10024),

# ('Noha', 'Y', 'Shams', 125, '1992-03-15', 'Suez', 'Al-Shaikh Zayed Rd', 43515, 'F', 10025);

# INSERT INTO Nurse VALUES (119, 'Registered Nurse');

# INSERT INTO Nurse VALUES (120, 'Certified Nursing Assistant');

# INSERT INTO Nurse VALUES (121, 'Nurse Practitioner');

# INSERT INTO Nurse VALUES (122, 'Licensed Practical Nurse');

# INSERT INTO Nurse VALUES (123, 'Clinical Nurse Specialist');

# INSERT INTO Nurse VALUES (124, 'Registered Nurse');

# INSERT INTO Nurse VALUES (125, 'Certified Nurse Midwife');

# INSERT INTO Doctor

# VALUES

# (101, 'Cardiologist'),

# (102, 'Neurologist'),

# (103, 'Orthopedic Surgeon'),

# (104, 'Pediatrician'),

# (105, 'Dermatologist'),

# (106, 'Ophthalmologist'),

# (107, 'General Surgeon'),

# (108, 'Plastic Surgeon'),

# (109, 'Gynecologist'),

# (110, 'Urologist');

# INSERT INTO Hospital

# VALUES

# (1, 'Cairo General Hospital', 'Cairo', 'Tahrir Square', 11511, 195, 'cgh@egypthealth.com', 5000, 10010),

# (2, 'Alexandria Medical Center', 'Alexandria', 'Corniche St', 21511, 196, 'amc@egypthealth.com', 3000, 10010),

# (3, 'Giza City Hospital', 'Giza', 'Pyramids Road', 12511, 197, 'gch@egypthealth.com', 4000, 10010),

# (4, 'Mansoura Teaching Hospital', 'Mansoura', 'El-Mansoura St', 35511, 198, 'mth@egypthealth.com', 3500, 10010),

# (5, 'Sharm El Sheikh Hospital', 'Sharm El Sheikh', 'Naama Bay', 46619, 199, 'seh@egypthealth.com', 2000, 10010),

# (6, 'Aswan University Hospital', 'Aswan', 'Nile Corniche', 81511, 200, 'auh@egypthealth.com', 2500, 10010),

# (7, 'Port Said Central Hospital', 'Port Said', 'Port Said St', 42511, 201, 'psch@egypthealth.com', 1500, 10010),

# (8, 'Hurghada General Hospital', 'Hurghada', 'Sheraton Road', 84511, 202, 'hgh@egypthealth.com', 2200, 10010),

# (9, 'Zagazig University Hospital', 'Zagazig', 'El-Sa’adah St', 44511, 203, 'zuh@egypthealth.com', 2700, 10010),

# (10, 'Marsa Matrouh Hospital', 'Marsa Matrouh', 'Marsa Matrouh Rd', 51711, 204, 'mmh@egypthealth.com', 1800, 10010),

# (11, 'Mansoura Specialized Hospital', 'Mansoura', 'Al-Mansoura St', 35512, 205, 'msh@egypthealth.com', 3200, 10010),

# (12, 'Suez General Hospital', 'Suez', 'Suez Canal St', 43512, 206, 'sgh@egypthealth.com', 2900, 10010),

# (13, 'Tanta University Hospital', 'Tanta', 'Mohamed Farid St', 31512, 207, 'tuh@egypthealth.com', 2700, 10010),

# (14, 'Fayoum Regional Hospital', 'Fayoum', 'Shakshouk Street', 63512, 208, 'frh@egypthealth.com', 2500, 10010),

# (15, 'Luxor General Hospital', 'Luxor', 'Corniche El-Nil', 85912, 209, 'lgh@egypthealth.com', 2200, 10010),

# (16, 'Assiut University Hospital', 'Assiut', 'El-Mohafza St', 71512, 210, 'auh@egypthealth.com', 3400, 10010),

# (17, 'Beni Suef Specialized Hospital', 'Beni Suef', 'Taha Hussein St', 62512, 211, 'bssh@egypthealth.com', 2000, 10010),

# (18, 'Minya General Hospital', 'Minya', 'Hussein St', 62112, 212, 'mgh@egypthealth.com', 2300, 10010),

# (19, 'Damietta Teaching Hospital', 'Damietta', 'Damietta Rd', 56612, 213, 'dth@egypthealth.com', 1800, 10010),

# (20, 'Damanhour General Hospital', 'Damanhour', 'Shahrour St', 52512, 214, 'dgh@egypthealth.com', 2100, 10010),

# (21, 'Gharbia General Hospital', 'Tanta', 'Gharbia St', 31513, 215, 'ggh@egypthealth.com', 2400, 10010),

# (22, 'Cairo University Hospital', 'Cairo', 'Kasr El Aini St', 11512, 216, 'cuh@egypthealth.com', 5000, 10010),

# (23, 'Shobra General Hospital', 'Cairo', 'Shobra St', 11611, 217, 'sghc@egypthealth.com', 3000, 10010),

# (24, 'Sharkia General Hospital', 'Zagazig', 'El-Sa’adah St', 44512, 218, 'sghz@egypthealth.com', 2200, 10010),

# (25, 'Giza Specialized Hospital', 'Giza', 'Pyramids Road', 12512, 219, 'gsh@egypthealth.com', 3100, 10010);

# INSERT INTO Blood\_Inventory

# VALUES

# (101, 25.5, '2024-11-01', 42, '4.5°C', 1),

# (102, 50.0, '2024-10-20', 30, '4.0°C', 2),

# (103, 15.7, '2024-10-25', 45, '5.0°C', 3),

# (104, 30.0, '2024-10-15', 60, '4.2°C', 4),

# (105, 45.3, '2024-11-05', 40, '4.8°C', 5),

# (106, 20.0, '2024-11-10', 35, '7.8°C', 6),

# (107, 32.5, '2024-11-09', 42, '3.1°C', 7),

# (108, 45.0, '2024-11-08', 30, '5.0°C', 2),

# (109, 18.7, '2024-11-07', 60, '2.6°C', 8),

# (110, 25.3, '2024-11-06', 45, '2.5°C', 9),

# (111, 38.4, '2024-11-05', 40, '6.0°C', 4),

# (112, 41.0, '2024-11-04', 30, '3.0°C', 1),

# (113, 19.6, '2024-11-03', 35, '4.0°C', 3),

# (114, 30.2, '2024-11-02', 42, '5.0°C', 6),

# (115, 27.7, '2024-11-01', 60, '4.2°C', 10),

# (116, 50.0, '2024-10-31', 45, '2.4°C', 15),

# (117, 44.8, '2024-10-30', 35, '6.6°C', 11),

# (118, 22.5, '2024-10-29', 30, '3.7°C', 12),

# (119, 34.7, '2024-10-28', 42, '4.4°C', 13),

# (120, 16.0, '2024-10-27', 40, '5.0°C', 14),

# (121, 29.3, '2024-10-26', 60, '4.8°C', 15),

# (122, 35.5, '2024-10-25', 45, '2.7°C', 19),

# (123, 40.2, '2024-10-24', 30, '6.9°C', 16),

# (124, 12.0, '2024-10-23', 35, '3.3°C', 23),

# (125, 28.0, '2024-10-22', 42, '4.1°C', 24);

# insert into Patient

# values

# (1, 'Ahmed', 'Mohammed', 'Ahmed', '2006-01-28', 'M', 'Obour', 'A+', 10001),

# (2, 'Ali', 'Hany', 'Fathy', '2001-01-01', 'M', 'Zamalek', 'B+', 10001),

# (3, 'Samir', 'Abdelrahman', 'Ali', '1999-12-01', 'M', 'Obour', 'A-', 10001),

# (4, 'Donya', 'Fathy', 'Samir', '2005-05-05', 'F', 'Badr', 'AB+', 10001),

# (5, 'Eyad', 'Badr', 'Mahmoud', '1998-08-08', 'M', 'Maadi', 'O-', 10006),

# (6, 'Yara', 'Amal', 'Khaled', '2002-04-15', 'F', 'Maadi', 'O+', 10006),

# (7, 'Karim', 'Adel', 'Sameh', '1997-11-22', 'M', 'Heliopolis', 'AB-', 10001),

# (8, 'Noha', 'Mona', 'Fawzy', '2005-07-08', 'F', 'Nasr City', 'B+', 10001),

# (9, 'Omar', 'Tarek', 'Hazem', '2001-03-19', 'M', 'Dokki', 'A-', 10005),

# (10, 'Leena', 'Laila', 'Nabil', '1999-09-25', 'F', 'Giza', 'O-', 10005),

# (11, 'Hazem', 'Hisham', 'Ayman', '1996-06-12', 'M', 'Cairo', 'A+', 10001),

# (12, 'Fatima', 'Ferial', 'Farouk', '2003-10-31', 'F', 'Alexandria', 'B+', 10002),

# (13, 'Amr', 'Ashraf', 'Ahmed', '2000-02-07', 'M', 'Giza', 'AB-', 10005),

# (14, 'Soha', 'Sabah', 'Saad', '1998-05-20', 'F', 'Cairo', 'O+', 10001),

# (15, 'Khaled', 'Kamal', 'Kamel', '2004-08-13', 'M', 'Alexandria', 'A-', 10002),

# (16, 'Rania', 'Ragaa', 'Raafat', '1995-11-04', 'F', 'Giza', 'B+', 10005),

# (17, 'Tareq', 'Tamer', 'Tawfik', '2001-03-21', 'M', 'Cairo', 'AB-', 10001),

# (18, 'Nevin', 'Naima', 'Nazmi', '1999-09-26', 'F', 'Alexandria', 'O+', 10002),

# (19, 'Youssef', 'Yasser', 'Yahya', '2003-10-30', 'M', 'Giza', 'A-', 10005),

# (20, 'Amira', 'Amal', 'Abdel-Aziz', '2000-02-08', 'F', 'Cairo', 'B+', 10001),

# (21, 'Hala', 'Hanan', 'Hassan', '2002-06-17', 'F', 'Maadi', 'O-', 10006),

# (22, 'Karim', 'Khaled', 'Kamal', '1998-12-23', 'M', 'Heliopolis', 'AB+', 10001),

# (23, 'Noha', 'Nadia', 'Nabil', '2005-08-09', 'F', 'Nasr City', 'B-', 10001),

# (24, 'Omar', 'Osama', 'Othman', '2001-04-20', 'M', 'Dokki', 'A+', 10005),

# (25, 'Leena', 'Laila', 'Lubna', '1999-10-26', 'F', 'Giza', 'O+', 10005);

# INSERT INTO Patient\_History (File\_Number, Phone\_Number, Gender, Date\_of\_Birth, Fname, M\_int, Lname, Admission\_Date, Diagnosis, Medical\_Record\_Number) VALUES

# ('PH001', '01010000001', 'M', '1985-01-10', 'Ahmed', NULL, 'Hassan', '2023-05-15', 'Flu', 1),

# ('PH002', '01010000002', 'F', '1990-02-20', 'Fatima', 'M.', 'Ali', '2023-03-20', 'Diabetes', 12),

# ('PH003', '01010000003', 'M', '1982-03-30', 'Mohamed', 'S.', 'Khaled', '2023-01-25', 'Hypertension', 3),

# ('PH004', '01010000004', 'F', '1995-04-15', 'Sara', 'H.', 'Ibrahim', '2023-02-28', 'Asthma', 4),

# ('PH005', '01010000005', 'M', '1978-05-05', 'Omar', NULL, 'El-Masry', '2022-11-11', 'Heart Disease', 9),

# ('PH006', '01010000006', 'F', '1992-06-12', 'Layla', 'R.', 'Badawy', '2023-04-10', 'Allergy', 6),

# ('PH007', '01010000007', 'M', '1989-07-23', 'Youssef', 'A.', 'Salah', '2023-03-15', 'Pneumonia', 7),

# ('PH008', '01010000008', 'F', '1998-08-27', 'Nura', 'T.', 'Hossam', '2023-04-22', 'Gastritis', 8),

# ('PH009', '01010000009', 'M', '1991-09-05', 'Karim', 'M.', 'Fouad', '2023-01-18', 'Bronchitis', 7),

# ('PH010', '01010000010', 'F', '1993-10-20', 'Amina', 'K.', 'Gamal', '2023-02-15', 'Anemia', 10),

# ('PH011', '01110000001', 'M', '1987-11-12', 'Walid', 'Q.', 'Ayman', '2023-05-01', 'Stroke', 11),

# ('PH012', '01110000002', 'F', '1994-12-25', 'Huda', NULL, 'Mustafa', '2023-03-28', 'Kidney Stones', 12),

# ('PH013', '01110000003', 'M', '1980-01-04', 'Nabil', 'F.', 'Samir', '2023-02-10', 'Hernia', 13),

# ('PH014', '01110000004', 'F', '1985-02-15', 'Dalia', 'H.', 'Said', '2023-01-22', 'Thyroid Disorder', 14),

# ('PH015', '01110000005', 'M', '1990-03-30', 'Sami', 'E.', 'Zaki', '2022-12-05', 'Chronic Pain', 15),

# ('PH016', '01110000006', 'F', '1991-04-17', 'Maya', NULL, 'Nasser', '2023-04-01', 'Back Pain', 16),

# ('PH017', '01110000007', 'M', '1988-05-24', 'Ibrahim', 'H.', 'Haidar', '2023-03-12', 'Digestive Issues', 17),

# ('PH018', '01110000008', 'F', '1996-06-08', 'Yasmin', 'M.', 'Salem', '2023-05-05', 'Skin Rash', 18),

# ('PH019', '01220000001', 'M', '1997-07-14', 'Fares', 'A.', 'Khalaf', '2023-01-30', 'Appendicitis', 19),

# ('PH020', '01220000002', 'F', '1984-08-30', 'Nadia', NULL, 'Farag', '2023-02-14', 'Fever', 20),

# ('PH021', '01220000003', 'M', '1990-09-18', 'Rami', 'Q.', 'Shams', '2023-03-22', 'Infection', 21),

# ('PH022', '01220000004', 'F', '1992-10-21', 'Salma', 'E.', 'Salah', '2023-04-15', 'Migraine', 22),

# ('PH023', '01220000005', 'M', '1981-11-11', 'Ali', 'N.', 'Said', '2023-02-28', 'Fatigue', 23),

# ('PH024', '01220000006', 'F', '1983-12-19', 'Hana', NULL, 'Abdelaziz', '2023-01-11', 'Hypertrophy', 24),

# ('PH025', '01220000007', 'M', '1994-01-25', 'Zain', 'T.', 'Sultan', '2023-03-10', 'Arthritis', 25);

# INSERT INTO Blood\_Request

# VALUES

# (10001, 2.5, 'A+', '2024-11-01', '', 'Pending', 1),

# (10002, 5.0, 'O-', '2024-11-02', '2024-11-03', 'Fulfilled', 5),

# (10003, 3.2, 'B+', '2024-11-04', '', 'Pending', 2),

# (10004, 1.8, 'AB-', '2024-11-05', '', 'Pending', 6),

# (10005, 4.5, 'O+', '2024-11-06', '2024-11-07', 'Fulfilled', 9),

# (10006, 3.0, 'A-', '2024-11-06', '2024-11-07', 'Fulfilled', 10),

# (10007, 4.0, 'B-', '2024-11-05', '', 'Pending', 3),

# (10008, 2.8, 'AB+', '2024-11-04', '', 'Pending', 4),

# (10009, 5.5, 'O-', '2024-11-03', '2024-11-04', 'Fulfilled', 7),

# (10010, 1.5, 'A+', '2024-11-02', '', 'Pending', 8),

# (10011, 3.7, 'B+', '2024-11-01', '', 'Pending', 11),

# (10012, 4.2, 'O+', '2024-10-31', '2024-11-01', 'Fulfilled', 12),

# (10013, 3.1, 'A-', '2024-10-30', '2024-10-31', 'Fulfilled', 13),

# (10014, 2.0, 'B-', '2024-10-29', '', 'Pending', 14),

# (10015, 4.8, 'AB+', '2024-10-28', '', 'Pending', 15),

# (10016, 3.3, 'O-', '2024-10-27', '2024-10-28', 'Fulfilled', 16),

# (10017, 5.0, 'A+', '2024-10-26', '', 'Pending', 17),

# (10018, 4.4, 'B+', '2024-10-25', '', 'Pending', 18),

# (10019, 3.2, 'O+', '2024-10-24', '2024-10-25', 'Fulfilled', 19),

# (10020, 2.9, 'A-', '2024-10-23', '2024-10-24', 'Fulfilled', 20),

# (10021, 4.1, 'B-', '2024-10-22', '', 'Pending', 21),

# (10022, 3.0, 'AB+', '2024-10-21', '', 'Pending', 22),

# (10023, 5.5, 'O-', '2024-10-20', '2024-10-21', 'Fulfilled', 23),

# (10024, 1.6, 'A+', '2024-10-19', '', 'Pending', 24),

# (10025, 4.0, 'B+', '2024-10-18', '', 'Pending', 25);

# INSERT INTO Transfusion\_Event VALUES

# (101, '2024-11-25', 0.5, 'Dr. Ahmed Gamal', 'Successful transfusion, no complications.', 1),

# (102, '2024-11-20', 0.3, 'Dr. Magdy Ali', 'Patient experienced mild dizziness post-transfusion.', 2),

# (103, '2024-11-15', 1.0, 'Dr. Sarah Mohamed', 'Patient showed immediate improvement.', 3),

# (104, '2024-11-10', 0.75, 'Dr. Mohamed Saad', 'All vitals stable after the procedure.', 4),

# (105, '2024-11-05', 2.0, 'Dr. Fatma Mohamed', 'Post-transfusion follow-up required for mild anemia.', 5),

# (106, '2024-11-25', 0.25, 'Dr. Nada Elgammal', 'All vitals stable after the procedure.', 6),

# (107, '2024-12-06', 1.0, 'Dr. Magdy Ali', 'Post-transfusion follow-up required for mild anemia.', 7),

# (108, '2024-11-10', 0.75, 'Dr. Mohamed Saad', 'Patient showed immediate improvement.', 8),

# (109, '2024-11-10', 2.0, 'Dr. Nada Elgammal', 'Patient experienced mild dizziness post-transfusion.', 9),

# (110, '2024-12-01', 0.6, 'Dr. Ali Youssef', 'Patient experienced slight fever post-procedure.', 10),

# (111, '2024-11-28', 0.9, 'Dr. Amira Hassan', 'Stable vitals post-transfusion.', 11),

# (112, '2024-11-22', 0.4, 'Dr. Khaled Ismail', 'Minor allergic reaction observed.', 12),

# (113, '2024-11-18', 1.2, 'Dr. Zeinab Omar', 'Successful transfusion, follow-up advised.', 13),

# (114, '2024-11-14', 0.8, 'Dr. Hossam Farouk', 'Patient condition improved significantly.', 14),

# (115, '2024-11-10', 0.5, 'Dr. Layla Hussein', 'Mild headache post-procedure.', 15),

# (116, '2024-11-05', 1.5, 'Dr. Tarek Hassan', 'Transfusion completed successfully.', 16),

# (117, '2024-12-03', 1.1, 'Dr. Yasmine Kamal', 'Vitals stable after transfusion.', 17),

# (118, '2024-11-30', 0.7, 'Dr. Omar Farid', 'Post-transfusion nausea reported.', 18),

# (119, '2024-11-25', 0.3, 'Dr. Hany Mahmoud', 'No complications, routine follow-up advised.', 19),

# (120, '2024-11-20', 2.0, 'Dr. Mariam Ali', 'Patient recovering steadily.', 20),

# (121, '2024-11-15', 0.75, 'Dr. Rania Youssef', 'Immediate improvement noted.', 21),

# (122, '2024-11-12', 1.0, 'Dr. Ayman Khalil', 'Patient experienced mild fever.', 22),

# (123, '2024-11-08', 0.85, 'Dr. Samira Nasr', 'Patient stable, follow-up in one week.', 23),

# (124, '2024-11-03', 1.4, 'Dr. Waleed Fathy', 'Successful procedure with no side effects.', 24),

# (125, '2024-12-06', 0.6, 'Dr. Iman Shokry', 'Patient showed steady improvement.', 25);

# insert into Donation

# values

# (1, 3.8, 'A+', 'Fair', '', '2023-11-15', 10001, 101),

# (2, 4.2, 'B-', 'Good', '', '2024-01-22', 10002, 102),

# (3, 3.9, 'AB+', 'Poor', '', '2023-12-08', 10003, 103),

# (4, 4.5, 'O-', 'Excellent', '', '2024-02-19', 10004, 104),

# (5, 3.7, 'A-', 'Fair', '', '2023-10-27', 10005, 105),

# (6, 4.1, 'B+', 'Good', '', '2024-03-12', 10006, 106),

# (7, 3.6, 'AB-', 'Poor', '', '2023-11-10', 10007, 107),

# (8, 4.3, 'O+', 'Excellent', '', '2024-04-05', 10008, 108),

# (9, 3.8, 'A+', 'Fair', '', '2023-12-02', 10009, 109),

# (10, 4.2, 'B-', 'Good', '', '2024-01-18', 10010, 110),

# (11, 3.9, 'AB+', 'Poor', '', '2023-11-29', 10011, 111),

# (12, 4.5, 'O-', 'Excellent', '', '2024-02-03', 10012, 112),

# (13, 3.7, 'A-', 'Fair', '', '2023-10-19', 10013, 113),

# (14, 4.1, 'B+', 'Good', '', '2024-03-06', 10014, 114),

# (15, 3.6, 'AB-', 'Poor', '', '2023-11-25', 10015, 115),

# (16, 4.3, 'O+', 'Excellent', '', '2024-04-11', 10016, 116),

# (17, 3.8, 'A+', 'Fair', '', '2023-12-16', 10017, 117),

# (18, 4.2, 'B-', 'Good', '', '2024-01-31', 10018, 118),

# (19, 3.9, 'AB+', 'Poor', '', '2023-12-22', 10019, 119),

# (20, 4.5, 'O-', 'Excellent', '', '2024-02-07', 10020, 120),

# (21, 3.7, 'A-', 'Fair', '', '2023-10-27', 10021, 121),

# (22, 4.1, 'B+', 'Good', '', '2024-03-12', 10022, 122),

# (23, 3.6, 'AB-', 'Poor', '', '2023-11-10', 10023, 123),

# (24, 4.3, 'O+', 'Excellent', '', '2024-04-05', 10024, 124),

# (25, 3.8, 'A+', 'Fair', '', '2023-12-02', 10025, 125);

# insert into Phone\_numbers

# values(1,'01125885237'),

# (2,'012345678912'),

# (3,'01013996633'),

# (4,'01558963147'),

# (5,'01236951236'),

# (6, '01001234567'),

# (7, '01112345678'),

# (8, '01223456789'),

# (9, '01009876543'),

# (10, '01118765432'),

# (11, '01227654321'),

# (12, '01005432109'),

# (13, '01114321098'),

# (14, '01223210987'),

# (15, '01001111111'),

# (16, '01112222222'),

# (17, '01223333333'),

# (18, '01004444444'),

# (19, '01115555555'),

# (20, '01226666666'),

# (21, '01007777777'),

# (22, '01118888888'),

# (23, '01229999999'),

# (24, '01000101010'),

# (25, '01111212121');

# INSERT INTO Makes

# VALUES

# (1, 2),

# (2, 1),

# (3, 5),

# (4, 6),

# (5, 3),

# (6, 4),

# (7, 7),

# (8, 10),

# (9, 13),

# (10, 8),

# (11, 20),

# (12, 25),

# (13, 9),

# (14, 16),

# (15, 17),

# (16, 14),

# (17, 15),

# (18, 21),

# (19, 22),

# (20, 11),

# (21, 18),

# (22, 19),

# (23, 23),

# (24, 24),

# (25, 12);

# /\*ebrahim gamal 241939\*/

# SELECT Fname AS 'First name' , Lname AS 'last Name' , Requested\_Volume , Request\_Date , Req\_Status

# FROM Patient , Blood\_Request

# Where Patient.Medical\_Record\_Num = Blood\_Request.MR\_Num AND Patient.Blood\_type = 'A+' AND Req\_Status = 'Pending'

# ORDER BY Request\_Date ASC;

# SELECT BR.Request\_ID , BR.Blood\_Type, BR.Fulfillment\_Date, P.Fname AS 'First name', P.Lname AS 'last Name'

# FROM Blood\_Request BR

# JOIN Patient P ON BR.MR\_Num = P.Medical\_Record\_Num

# WHERE BR.Req\_Status = 'Fulfilled';

# SELECT Transfusion\_ID, Transfusion\_Date, Volume\_Transfered\_litres, Doctor\_in\_Charge

# FROM Transfusion\_Event

# WHERE Medical\_Record\_Num IN (

# SELECT Medical\_Record\_Number

# FROM Patient\_History

# WHERE Diagnosis = 'Diabetes'

# );

# SELECT P.Blood\_Type AS 'Blood Type', COUNT(B.Request\_ID) AS 'Total Requests', SUM(B.Requested\_Volume) AS 'Total Volume Requested (L)'

# FROM Patient P JOIN Blood\_Request B ON P.Medical\_Record\_Num = B.MR\_Num

# GROUP BY P.Blood\_Type

# ORDER BY SUM(B.Requested\_Volume) DESC;

# SELECT Fname AS 'First Name',Lname AS 'Last Name',Blood\_Type , Transfusion\_Date ,Volume\_Transfered\_litres ,Doctor\_in\_Charge

# FROM Patient P LEFT OUTER JOIN Transfusion\_Event T ON P.Medical\_Record\_Num = T.Medical\_Record\_Num

# ORDER BY

# P.Lname, P.Fname;

# /\*ebrahim gamal 241939\*/

# /\*sohaila taher245365\*/

# SELECT Blood\_Type, Req\_Status, COUNT(\*) AS Total\_Requests

# FROM Blood\_Request

# GROUP BY Blood\_Type, Req\_Status;

# SELECT d.Fname AS Donor\_FirstName, d.Lname AS Donor\_LastName, dh.Last\_Donation\_Date

# FROM Donor d

# LEFT JOIN Donor\_History dh ON d.Donor\_ID = dh.Donor\_ID;

# SELECT

# p.Fname AS Patient\_FirstName,

# p.Lname AS Patient\_LastName,

# br.Requested\_Volume,

# br.Blood\_Type,

# br.Request\_Date,

# br.Req\_Status

# FROM

# Patient p

# INNER JOIN

# Blood\_Request br ON p.Medical\_Record\_Num = br.MR\_Num;

# SELECT Donor.Fname + ' '+ Donor.Lname AS Name, Donor\_ID,

# DATEDIFF(YEAR, Date\_of\_Birth, GETDATE()) AS Age

# FROM Donor;

# /\*sohaila taher245365\*/

# /\*shahd osama 247915\*/

# SELECT E.Fname, E.Lname

# FROM Employee E

# WHERE E.Blood\_Bank\_ID = (

# SELECT B.ID

# FROM Blood\_Bank B

# WHERE B.City = 'Cairo'

# );

# SELECT H.Hospital\_ID, H.Name AS Hospital\_Name, H.City AS Hospital\_City, H.Street, H.Zip\_code, B.Bank\_Name, B.City AS Blood\_Bank\_City, B.Contact\_Number

# FROM Hospital H

# JOIN Blood\_Bank B ON H.Blood\_Bank\_ID = B.ID;

# SELECT B.Bank\_Name, COUNT(E.Ssn) AS Employee\_Count

# FROM Blood\_Bank B

# LEFT JOIN Employee E ON B.ID = E.Blood\_Bank\_ID

# GROUP BY B.Bank\_Name;

# SELECT City, COUNT(\*) AS Employee\_Count

# FROM Employee

# GROUP BY City;

# SELECT H.Name AS Hospital\_Name, B.Bank\_Name AS Blood\_Bank\_Name

# FROM Hospital H, Blood\_Bank B

# WHERE H.Blood\_Bank\_ID = B.ID;

# SELECT COUNT(\*) AS Total\_Blood\_Banks

# FROM Blood\_Bank;

# /\*shahd osama 247915\*/

# /\*abdelrahman shehta 243700\*/

# SELECT Donation\_ID, donation.Vloume\_Donated, Health\_Status

# FROM Donation

# WHERE Health\_Status = 'Excellent';

# SELECT Fname+' '+ Lname AS 'Full\_Name' , SUM(Vloume\_Donated) AS 'Total\_Volume'

# FROM Donor

# JOIN Donation

# ON Donor\_ID = Donation\_ID

# GROUP BY Fname, Lname;

# SELECT Fname, Lname, Donation.Blood\_Type,Vloume\_Donated,Donation\_Date

# FROM Donor JOIN Donation

# ON Donor\_ID = Donation\_ID;

# SELECT AVG(Vloume\_Donated) AS Avg\_Blood\_Donated

# FROM Donation;

# SELECT Fname,Lname, Vloume\_Donated

# FROM Donor left outer JOIN Makes

# ON Donor.Donor\_ID = Makes.Donor\_ID right outer JOIN Donation

# ON Makes.Donation\_ID = Donation.Donation\_ID;

# SELECT Fname, Lname, Address

# FROM Donor

# WHERE Donor\_ID IN (

# SELECT Donor\_ID

# FROM Makes

# WHERE Donation\_ID IN (

# SELECT Donation\_ID

# FROM Donation

# WHERE Donation\_Date between '2024-1-1' and '2024-12-30'

# )

# );

# /\*abdelrahman shehta 243700\*/

# /\*omayr ali 242994\*/

# SELECT Bank\_Name, City

# FROM Blood\_Bank

# WHERE ID IN (

# SELECT Blood\_Bank\_ID

# FROM Donation

# WHERE Health\_Status = 'Excellent'

# );

# SELECT Storage\_Facility.Storage\_ID, SUM(Stored\_Blood\_Quantity) AS 'Total\_Blood'

# FROM Storage\_Facility JOIN Blood\_Inventory

# ON Storage\_Facility.Storage\_ID = Blood\_Inventory.Storage\_ID

# GROUP BY Storage\_Facility.Storage\_ID

# HAVING SUM(Stored\_Blood\_Quantity) < 30

# ORDER BY 'Total\_Blood';

# 

# 

# SELECT Inv\_ID, DATEADD(day, Validity\_Period, Date\_Stored) AS 'Expiry Date'

# FROM Blood\_Inventory

# ORDER BY 'Expiry Date';

# SELECT Storage\_Facility.Storage\_ID, Storage\_Facility.Facility\_Type, Storage\_Facility.Capacity, Storage\_Facility.City

# FROM Storage\_Facility LEFT JOIN Blood\_Inventory

# ON Storage\_Facility.Storage\_ID = Blood\_Inventory.Storage\_ID

# WHERE Blood\_Inventory.Storage\_ID IS NULL;

# /\*omayr ali 242994\*/

# Queries:

# Ebrahim gamal 241939:

Querie1:

check all pending blood requests for a specific blood type ("A+"). return the patient’s name, requested volume, request date, and request status.

**Code:**

SELECT Fname AS 'First name' , Lname AS 'last Name' , Requested\_Volume , Request\_Date , Req\_Status

FROM Patient , Blood\_Request

Where Patient.Medical\_Record\_Num = Blood\_Request.MR\_Num AND Patient.Blood\_type = 'A+' AND Req\_Status = 'Pending'

ORDER BY Request\_Date ASC;

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Querie 2:

Retrieve all fulfilled blood requests with their patient details.

**Code:**

SELECT BR.Request\_ID , BR.Blood\_Type, BR.Fulfillment\_Date, P.Fname AS 'First name', P.Lname AS 'last Name'

FROM Blood\_Request BR

JOIN Patient P ON BR.MR\_Num = P.Medical\_Record\_Num

WHERE BR.Req\_Status = 'Fulfilled';

A screenshot of a table

Description automatically generated

Querie 3:

Retrieve details of transfusion events for patients with a specific diagnosis.

**Code:**

SELECT Transfusion\_ID, Transfusion\_Date, Volume\_Transfered\_litres, Doctor\_in\_Charge

FROM Transfusion\_Event

WHERE Medical\_Record\_Num IN (

SELECT Medical\_Record\_Number

FROM Patient\_History

WHERE Diagnosis = 'Diabetes'

);



Querie 4:

how much blood is being requested by patients grouped by their blood type.

**Code:**

SELECT P.Blood\_Type AS 'Blood Type', COUNT(B.Request\_ID) AS 'Total Requests', SUM(B.Requested\_Volume) AS 'Total Volume Requested (L)'

FROM Patient P JOIN Blood\_Request B ON P.Medical\_Record\_Num = B.MR\_Num

GROUP BY P.Blood\_Type

ORDER BY SUM(B.Requested\_Volume) DESC;

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Querie 5:

list of patients along with their transfusion details. For patients who haven't undergone any transfusion, display their details with null values for transfusion information. This ensures all patients are accounted for, whether they have a transfusion record or not.

**Code:**

SELECT Fname AS 'First Name',Lname AS 'Last Name',Blood\_Type , Transfusion\_Date ,Volume\_Transfered\_litres ,Doctor\_in\_Charge

FROM Patient P LEFT OUTER JOIN Transfusion\_Event T ON P.Medical\_Record\_Num = T.Medical\_Record\_Num

ORDER BY

P.Lname, P.Fname;

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# Sohaila245365

# 1. Nested Query

# Scenario:

# Retrieve the latest donation date for each donor as part of donor management efforts to identify individuals whose donations are becoming outdated. This query helps staff easily pinpoint donors who have not participated in recent donation drives, so they can be contacted with reminders or encouragement to donate again.

# Code:

# SELECT d.Donor\_ID, d.Fname, d.Lname,

# (SELECT MAX(Last\_Donation\_Date)

# FROM Donor\_History dh

# WHERE dh.Donor\_ID = d.Donor\_ID)

# AS Last\_Donation\_Date

# FROM Donor d;

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# 2. Aggregation Query

# Scenario:

# Retrieve the count of blood requests fulfilled and pending, grouped by blood type, to analyze blood request management effectiveness. This query helps track how many requests for each blood type have been completed (fulfilled) and how many are still pending.

# Code:

# SELECT Blood\_Type, Req\_Status, COUNT(\*) AS Total\_Requests

# FROM Blood\_Request

# GROUP BY Blood\_Type, Req\_Status;

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# 3. Left Join Query

# Scenario:

# Retrieve all donors along with their donation history, including those who have not made any donations. This query ensures that every donor is listed, whether they have donated or not, and provides their last donation date

# Code:

# SELECT d.Fname AS Donor\_FirstName, d.Lname AS Donor\_LastName, dh.Last\_Donation\_Date

# FROM Donor d

# LEFT JOIN Donor\_History dh ON d.Donor\_ID = dh.Donor\_ID;

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# A screenshot of a computer Description automatically generated

# 4. Inner Join Query

# Scenario:

# Retrieve all patients along with their blood request details, including the requested volume, blood type, request date, and request status. This query provides a detailed overview of each patient's blood request history.

# Code:

# SELECT

# p.Fname AS Patient\_FirstName,

# p.Lname AS Patient\_LastName,

# br.Requested\_Volume,

# br.Blood\_Type,

# br.Request\_Date,

# br.Req\_Status

# FROM

# Patient p

# INNER JOIN

# Blood\_Request br ON p.Medical\_Record\_Num = br.MR\_Num;

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# 5. Simple Query

# Scenario:

# Retrieve each donor's ID, full name, and age (calculated from their date of birth).

# Code:

# SELECT Donor.Fname + ' '+ Donor.Lname AS Name, Donor\_ID,

# DATEDIFF(YEAR, Date\_of\_Birth, GETDATE()) AS Age

# FROM Donor;

# A screenshot of a computer screen Description automatically generated A screenshot of a computer Description automatically generated

# Shahd247915

# SELECT E.Fname, E.Lname

# FROM Employee E

# WHERE E.Blood\_Bank\_ID = (

# SELECT B.ID

# FROM Blood\_Bank B

# WHERE B.City = 'Cairo'

# );

# Screenshot 2024-12-08 225704

# SELECT H.Hospital\_ID, H.Name AS Hospital\_Name, H.City AS Hospital\_City, H.Street, H.Zip\_code, B.Bank\_Name, B.City AS Blood\_Bank\_City, B.Contact\_Number

# FROM Hospital H

# JOIN Blood\_Bank B ON H.Blood\_Bank\_ID = B.ID;

# Screenshot 2024-12-08 225941

# SELECT B.Bank\_Name, COUNT(E.Ssn) AS Employee\_Count

# FROM Blood\_Bank B

# LEFT JOIN Employee E ON B.ID = E.Blood\_Bank\_ID

# GROUP BY B.Bank\_Name;

# Screenshot 2024-12-08 230548

# SELECT COUNT(\*) AS Total\_Blood\_Banks

# FROM Blood\_Bank;

# Screenshot 2024-12-08 233333

# SELECT COUNT(\*) AS Total\_Blood\_Banks

# FROM Blood\_Bank;

# Screenshot 2024-12-08 233407

# SELECT H.Name AS Hospital\_Name, B.Bank\_Name AS Blood\_Bank\_Name

# FROM Hospital H, Blood\_Bank B

# WHERE H.Blood\_Bank\_ID = B.ID;

# Screenshot 2024-12-08 233437

# Abdelrahman shehta 243700:

# Donations with health statues excellent:

# SELECT Donation\_ID, donation.Vloume\_Donated, Health\_Status

# FROM Donation

# WHERE Health\_Status = 'Excellent';

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# Retrieve the sum of the donated volume of each Donor:

# SELECT Fname+' '+ Lname AS 'Full\_Name' , SUM(Vloume\_Donated) AS 'Total\_Volume'

# FROM Donor JOIN Donation ON Donor\_ID = Donation\_ID

# GROUP BY Fname, Lname;

# A table with numbers and letters Description automatically generated

# Retrieve the Blood type and volume donated in a specific date

# SELECT Fname, Lname, Donation.Blood\_Type,Vloume\_Donated,Donation\_Date

# FROM Donor JOIN Donation ON Donor\_ID = Donation\_ID;

# A screenshot of a computer Description automatically generated

# Retrieve Average volume donated from Donation

# SELECT AVG(Vloume\_Donated) AS Avg\_Blood\_Donated

# FROM Donation;

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# Get the name of donors and their donation volumes and using left and right outer join:

# SELECT Fname,Lname, Vloume\_Donated

# FROM Donor left outer JOIN Makes ON Donor.Donor\_ID = Makes.Donor\_ID right outer JOIN Donation

# ON Makes.Donation\_ID = Donation.Donation\_ID;

# A table of names with black text Description automatically generated

# 

# Donors donated in year 2024 :

# SELECT Fname, Lname, Address

# FROM Donor WHERE Donor\_ID

# IN (     SELECT Donor\_ID     FROM Makes     WHERE Donation\_ID IN (         SELECT Donation\_ID         FROM Donation         WHERE Donation\_Date between '2024-1-1' and '2024-12-30'     ) );

# 

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# Omayr ali : 242994

# 1. Get Blood Banks with Donors having "Excellent" Health Status:

# SELECT Bank\_Name, City

# FROM Blood\_Bank

# WHERE ID IN (

# SELECT Blood\_Bank\_ID

# FROM Donation

# WHERE Health\_Status = 'Excellent'

# );

# A screenshot of a computer Description automatically generated

# 2. Storage facilities that have less than 30 units of blood stored:

# SELECT Storage\_Facility.Storage\_ID, SUM(Stored\_Blood\_Quantity) AS 'Total\_Blood'

# FROM Storage\_Facility JOIN Blood\_Inventory

# ON Storage\_Facility.Storage\_ID = Blood\_Inventory.Storage\_ID

# GROUP BY Storage\_Facility.Storage\_ID

# HAVING SUM(Stored\_Blood\_Quantity) < 30

# ORDER BY 'Total\_Blood';

# A screenshot of a data Description automatically generated

# 3. Calculate the expiry date of blood units stored in the storage facility:

# SELECT Inv\_ID, DATEADD(day, Validity\_Period, Date\_Stored) AS 'Expiry Date'

# FROM Blood\_Inventory

# ORDER BY 'Expiry Date';

# A screenshot of a computer screen Description automatically generated

# 4. Find Storage Facilities with No Blood Inventory:

# SELECT Storage\_Facility.Storage\_ID, Storage\_Facility.Facility\_Type, Storage\_Facility.Capacity, Storage\_Facility.City

# FROM Storage\_Facility LEFT JOIN Blood\_Inventory

# ON Storage\_Facility.Storage\_ID = Blood\_Inventory.Storage\_ID

# WHERE Blood\_Inventory.Storage\_ID IS NULL

# A screenshot of a table Description automatically generated

# 5. Retrieve storage facilities with capacity greater than 700:

# SELECT Storage\_ID, City, Street, Postal\_Code, Capacity

# FROM Storage\_Facility

# WHERE Capacity > 700

# ORDER BY Capacity DESC;

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