

Name : Moneeb Ahmed Al-Alawneh

Code :

```
CREATE TABLE Pharmacy (
```

```
    PharmacyID NUMBER GENERATED BY DEFAULT AS IDENTITY PRIMARY KEY,
```

```
    PharmacyName VARCHAR2(100) NOT NULL,
```

```
    Address VARCHAR2(255),
```

```
    Phone VARCHAR2(15)
```

```
);
```

```
CREATE TABLE Employees (
```

```
    EmployeeID NUMBER GENERATED BY DEFAULT AS IDENTITY PRIMARY KEY,
```

```
    FirstName VARCHAR2(50) NOT NULL,
```

```
    LastName VARCHAR2(50) NOT NULL,
```

```
    Email VARCHAR2(100) UNIQUE NOT NULL,
```

```
    Phone VARCHAR2(15),
```

```
    PharmacyID NUMBER,
```

```
    Salary NUMBER,
```

```
    HireDate DATE,
```

```
    CONSTRAINT fk_Pharmacy FOREIGN KEY (PharmacyID) REFERENCES Pharmacy(PharmacyID)
```

```
);
```

```
ALTER TABLE Employees
```

```
ADD Position VARCHAR2(50);
```

UPDATE Employees

SET Position = 'Admin'

WHERE EmployeeID = 1;

UPDATE Employees

SET Position = 'Pharmacist'

WHERE EmployeeID = 2;

UPDATE Employees

SET Position = 'Pharmacist'

WHERE EmployeeID = 3;

UPDATE Employees

SET Position = 'Admin'

WHERE EmployeeID = 4;

UPDATE Employees

SET Position = 'Technician'

WHERE EmployeeID = 5;

ALTER TABLE Employees

ADD Address VARCHAR2(255);

UPDATE Employees

SET Address = '123 Main St, Amman'

WHERE EmployeeID = 1;

UPDATE Employees

SET Address = '456 Health Ave, Amman'

WHERE EmployeeID = 2;

UPDATE Employees

SET Address = '789 Wellness Rd, Amman'

WHERE EmployeeID = 3;

UPDATE Employees

SET Address = '321 Fit Ln, Amman'

WHERE EmployeeID = 4;

UPDATE Employees

SET Address = '654 Care St, Amman'

WHERE EmployeeID = 5;

CREATE TABLE Roles (

 RoleID NUMBER GENERATED BY DEFAULT AS IDENTITY PRIMARY KEY,

 RoleName VARCHAR2(50) NOT NULL

);

CREATE TABLE Medicines (

```
MedicineID NUMBER GENERATED BY DEFAULT AS IDENTITY PRIMARY KEY,  
MedicineName VARCHAR2(100) NOT NULL,  
Brand VARCHAR2(50),  
Price NUMBER(10, 2),  
Stock NUMBER,  
ExpirationDate DATE,  
PharmacyID NUMBER,  
CONSTRAINT fk_MedicinePharmacy FOREIGN KEY (PharmacyID) REFERENCES Pharmacy(PharmacyID)  
);
```

```
CREATE TABLE Orders (  
OrderID NUMBER GENERATED BY DEFAULT AS IDENTITY PRIMARY KEY,  
CustomerName VARCHAR2(100) NOT NULL,  
MedicineID NUMBER,  
OrderDate DATE,  
CONSTRAINT fk_MedicineOrder FOREIGN KEY (MedicineID) REFERENCES Medicines(MedicineID)  
);
```

```
INSERT INTO Pharmacy (PharmacyName, Address, Phone) VALUES ('Al Shifa Pharmacy', '123 Health St,  
Amman', '0791234567');
```

```
INSERT INTO Pharmacy (PharmacyName, Address, Phone) VALUES ('Al Dawaa Pharmacy', '456 Cure Ave,  
Amman', '0797654321');
```

```
INSERT INTO Pharmacy (PharmacyName, Address, Phone) VALUES ('Family Pharmacy', '789 Wellness Rd,  
Amman', '0795555555');
```

```
INSERT INTO Pharmacy (PharmacyName, Address, Phone) VALUES ('Health Plus Pharmacy', '321 Fit Ln,  
Amman', '0799999999');
```

```
INSERT INTO Pharmacy (PharmacyName, Address, Phone) VALUES ('Jordan Pharmacy', '654 Med St, Amman', '0791111111');
```

```
INSERT INTO Employees (FirstName, LastName, Email, Phone, PharmacyID, Salary, HireDate) VALUES ('Ali', 'Mohammed', 'ali.mohammed@example.com', '0792345678', 1, 5000, TO_DATE('2020-01-15', 'YYYY-MM-DD'));
```

```
INSERT INTO Employees (FirstName, LastName, Email, Phone, PharmacyID, Salary, HireDate) VALUES ('Sara', 'Ahmed', 'sara.ahmed@example.com', '0798765432', 2, 6000, TO_DATE('2019-05-20', 'YYYY-MM-DD'));
```

```
INSERT INTO Employees (FirstName, LastName, Email, Phone, PharmacyID, Salary, HireDate) VALUES ('Omar', 'Yousef', 'omar.yousef@example.com', '0791234560', 3, 4500, TO_DATE('2021-03-25', 'YYYY-MM-DD'));
```

```
INSERT INTO Employees (FirstName, LastName, Email, Phone, PharmacyID, Salary, HireDate) VALUES ('Lina', 'Khaled', 'lina.khaled@example.com', '0796543210', 4, 7000, TO_DATE('2018-07-30', 'YYYY-MM-DD'));
```

```
INSERT INTO Employees (FirstName, LastName, Email, Phone, PharmacyID, Salary, HireDate) VALUES ('Rami', 'Sami', 'rami.sami@example.com', '0791112222', 5, 5500, TO_DATE('2022-10-01', 'YYYY-MM-DD'));
```

```
INSERT INTO Roles (RoleName) VALUES ('Admin');
```

```
INSERT INTO Roles (RoleName) VALUES ('Pharmacist');
```

```
INSERT INTO Roles (RoleName) VALUES ('Cashier');
```

```
INSERT INTO Roles (RoleName) VALUES ('Technician');
```

```
INSERT INTO Roles (RoleName) VALUES ('Manager');
```

```
INSERT INTO Medicines (MedicineName, Brand, Price, Stock, ExpirationDate, PharmacyID) VALUES ('Aspirin', 'Brand A', 10.00, 100, TO_DATE('2025-12-31', 'YYYY-MM-DD'), 1);
```

```
INSERT INTO Medicines (MedicineName, Brand, Price, Stock, ExpirationDate, PharmacyID) VALUES ('Ibuprofen', 'Brand B', 15.00, 200, TO_DATE('2026-01-15', 'YYYY-MM-DD'), 2);
```

```
INSERT INTO Medicines (MedicineName, Brand, Price, Stock, ExpirationDate, PharmacyID) VALUES ('Paracetamol', 'Brand C', 8.00, 150, TO_DATE('2024-11-20', 'YYYY-MM-DD'), 3);
```

```
INSERT INTO Medicines (MedicineName, Brand, Price, Stock, ExpirationDate, PharmacyID) VALUES ('Amoxicillin', 'Brand D', 20.00, 80, TO_DATE('2026-03-10', 'YYYY-MM-DD'), 4);
```

```
INSERT INTO Medicines (MedicineName, Brand, Price, Stock, ExpirationDate, PharmacyID) VALUES ('Lisinopril', 'Brand E', 25.00, 50, TO_DATE('2025-05-30', 'YYYY-MM-DD'), 5);
```

```
INSERT INTO Orders (CustomerName, MedicineID, OrderDate) VALUES ('John Doe', 1, SYSDATE);
```

```
INSERT INTO Orders (CustomerName, MedicineID, OrderDate) VALUES ('Jane Smith', 2, SYSDATE);
```

```
INSERT INTO Orders (CustomerName, MedicineID, OrderDate) VALUES ('Ali Khaled', 3, SYSDATE);
```

```
INSERT INTO Orders (CustomerName, MedicineID, OrderDate) VALUES ('Sara Ali', 4, SYSDATE);
```

```
INSERT INTO Orders (CustomerName, MedicineID, OrderDate) VALUES ('Rami Fadi', 5, SYSDATE);
```

- Retrieve all the data from all tables :

```
SELECT * FROM Pharmacy;
```

```
SELECT * FROM Employees;
```

```
SELECT * FROM Roles;
```

```
SELECT * FROM Medicines;
```

```
SELECT * FROM Orders;
```

ORDERID	CUSTOMERNAME	MEDICINEID	ORDERDATE
1	John Doe		1 27-OCT-24
2	Jane Smith		2 27-OCT-24
3	Ali Khaled		3 27-OCT-24
4	Sara Ali		4 27-OCT-24
5	Rami Fadi		5 27-OCT-24

MEDICINEID	MEDICINENAME	BRAND	PRICE	STOCK	EXPIRATIONDATE	PHARMACYID
1	Aspirin	Brand A	10	100	31-DEC-25	1
2	Ibuprofen	Brand B	15	200	15-JAN-26	2
3	Paracetamol	Brand C	8	150	20-NOV-24	3
4	Amoxicillin	Brand D	20	80	10-MAR-26	4
5	Lisinopril	Brand E	25	50	30-MAY-25	5

ROLEID	ROLENAME
1	Admin
2	Pharmacist
3	Cashier
4	Technician
5	Manager

EMPLOYEEID	FIRSTNAME	LASTNAME	EMAIL	PHONE	PHARMACYID	SALARY	HIREDATE
1	Ali	Mohammed	ali.mohammed@example.com	0792345678	1	5000	15-JAN-20
2	Sara	Ahmed	sara.ahmed@example.com	0798765432	2	6000	20-MAY-19
3	Omar	Yousef	omar.yousef@example.com	0791234560	3	4500	25-MAR-21
4	Lina	Khaled	lina.khaled@example.com	0796543210	4	7000	30-JUL-18
5	Rami	Sami	rami.sami@example.com	0791112222	5	5500	01-OCT-22

PHARMACYID	PHARMACYNAME	ADDRESS	PHONE
1	Al Shifa Pharmacy	123 Health St, Amman	0791234567
2	Al Dawaa Pharmacy	456 Cure Ave, Amman	0797654321
3	Family Pharmacy	789 Wellness Rd, Amman	0795555555
4	Health Plus Pharmacy	321 Fit Ln, Amman	0799999999
5	Jordan Pharmacy	654 Med St, Amman	0791111111

- Retrieve customers whose name contains an 'a' letter :

```
SELECT * FROM Orders
```

```
WHERE CustomerName LIKE '%a%';
```

Result :

ORDERID	CUSTOMERNAME	MEDICINEID	ORDERDATE
1	2 Jane Smith		2 27-OCT-24
2	3 Ali Khaled		3 27-OCT-24
3	4 Sara Ali		4 27-OCT-24
4	5 Rami Fadi		5 27-OCT-24

- Retrieve employees whose position is Admin or Pharmacist. (Using twoways) :

```
SELECT * FROM Employees
```

```
WHERE Position IN ('Admin', 'Pharmacist');
```

Result :

EMPLOYEEID	FIRSTNAME	LASTNAME	EMAIL	PHONE	PHARMACYID	SALARY	HIREDATE	POSITION
1	Ali	Mohammed	ali.mohammed@example.com	0792345678	1	5000	15-JAN-20	Admin
2	Sara	Ahmed	sara.ahmed@example.com	0798765432	2	6000	20-MAY-19	Pharmacist
3	Omar	Yousef	omar.yousef@example.com	0791234560	3	4500	25-MAR-21	Pharmacist
4	Lina	Khaled	lina.khaled@example.com	0796543210	4	7000	30-JUL-18	Admin

- Retrieve the employees whose name ends with 'd' and contains five alphabets :

```
SELECT * FROM Employees
```

```
WHERE LENGTH(FirstName) = 5
```

```
AND FirstName LIKE '%d';
```

Result :

EMPLOY...	FIRSTN...	LASTNA...	EMAIL	PHONE	PHARMA...	SALARY	HIREDATE	POSITION

- Retrieve employees who have the 3 highest salaries :

```
SELECT *
```

```
FROM (SELECT * FROM Employees
```

```
ORDER BY Salary DESC
```

```
)
```

Result :

EMPLOYEEID	FIRSTNAME	LASTNAME	EMAIL	PHONE	PHARMACYID	SALARY	HIREDATE	POSITION
1	4 Lina	Khaled	lina.khaled@example.com	0796543210	4	7000	30-JUL-18	Admin
2	2 Sara	Ahmed	sara.ahmed@example.com	0798765432	2	6000	20-MAY-19	Pharmacist
3	5 Rami	Sami	rami.sami@example.com	0791112222	5	5500	01-OCT-22	Technician

- Retrieve the top 3 records from employee table :

```
SELECT * FROM Employees
```

```
WHERE ROWNUM <= 3;
```

Result :

EMPLOYEEID	FIRSTNAME	LASTNAME	EMAIL	PHONE	PHARMACYID	SALARY	HIREDATE	POSITION
1	Ali	Mohammed	ali.mohammed@example.com	0792345678	1	5000	15-JAN-20	Admin
2	Sara	Ahmed	sara.ahmed@example.com	0798765432	2	6000	20-MAY-19	Pharmacist
3	Omar	Yousef	omar.yousef@example.com	0791234560	3	4500	25-MAR-21	Pharmacist

- Retrieve the top 30% records from employee table :

```
SELECT * FROM Employees
```

```
WHERE ROWNUM <= (SELECT COUNT(*) * 0.3 FROM Employees);
```

Result :

EMPLOYEEID	FIRSTNAME	LASTNAME	EMAIL	PHONE	PHARMACYID	SALARY	HIREDATE	POSITION
1	Ali	Mohammed	ali.mohammed@example.com	0792345678	1	5000	15-JAN-20	Admin

- Retrieve the name with the uppercase first letter (using built-in function) :

```
SELECT INITCAP(FirstName) AS CapitalizedFirstName, INITCAP(LastName) AS CapitalizedLastName
```

```
FROM Employees;
```

Result :

CAPITALIZEDFIRSTNAME	CAPITALIZEDLASTNAME
1 Ali	Mohammed
2 Sara	Ahmed
3 Omar	Yousef
4 Lina	Khaled
5 Rami	Sami

- Set the salary value 600 JD when dating of employment before 27/10/2021 :

UPDATE Employees

SET Salary = 600

WHERE HireDate < TO_DATE('2021-10-27', 'YYYY-MM-DD');

- Retrieve the location of the pharmacies and the location for the employees using one Query :

CREATE VIEW PharmacyAndEmployeeLocations AS

SELECT

p.PharmacyName,

p.Address AS PharmacyAddress,

e.FirstName || ' ' || e.LastName AS EmployeeName,

e.Address AS EmployeeAddress

FROM

Pharmacy p

JOIN

Employees e ON p.PharmacyID = e.PharmacyID; -- تأكد من وجود علاقة صحيحة بين الجداول

SELECT * FROM PharmacyAndEmployeeLocations;

Result :

	PHARMACYNAME	PHARMACYADDRESS	EMPLOYEEENAME	EMPLOYEEADDRESS
1	Al Shifa Pharmacy	123 Health St, Amman	Ali Mohammed	123 Main St, Amman
2	Al Dawaa Pharmacy	456 Cure Ave, Amman	Sara Ahmed	456 Health Ave, Amman
3	Family Pharmacy	789 Wellness Rd, Amman	Omar Yousef	789 Wellness Rd, Amman
4	Health Plus Pharmacy	321 Fit Ln, Amman	Lina Khaled	321 Fit Ln, Amman
5	Jordan Pharmacy	654 Med St, Amman	Rami Sami	654 Care St, Amman

- Retrieve the information of employees who live in the same location as the pharmacy :

```
CREATE VIEW EmployeesInSameLocation AS
```

```
SELECT
```

```
    e.FirstName,
```

```
    e.LastName,
```

```
    p.PharmacyName,
```

```
    p.Address AS PharmacyAddress
```

```
FROM
```

```
    Employees e
```

```
JOIN
```

```
    Pharmacy p ON e.Address = p.Address;
```

```
SELECT * FROM EmployeesInSameLocation;
```

Result :

	FIRSTNAME	LASTNAME	PHARMACYNAME	PHARMACYADDRESS
1	Omar	Yousef	Family Pharmacy	789 Wellness Rd, Amman
2	Lina	Khaled	Health Plus Pharmacy	321 Fit Ln, Amman