

1.Patient Table:

```
SELECT * FROM Patient;
```

Output:

PATIENTID	NAME	GENDER	ADDRESS	EMAIL	CONTACTNUMBER	MEDICALHISTORY	ALLERGIES
1	1 Ahmed Khan	Male	House 15, F-7/1, Islamabad	ahmed.khan@example.pk	03001234567	Diabetes	None
2	2 Ayesha Ali	Female	House 21, Gulshan, Karachi	ayesha.ali@example.pk	03019876543	Hypertension	Peanuts
3	3 Bilal Ahmed	Male	Street 10, Model Town, Lahore	bilal.ahmed@example.pk	03211234567	Asthma	Dust
4	4 Fatima Siddiqui	Female	Block A, Clifton, Karachi	fatima.siddiqui@example.pk	03321234567	None	Penicillin
5	5 Hassan Qureshi	Male	Street 4, DHA, Lahore	hassan.qureshi@example.pk	03451234567	Heart Disease	None
6	6 Zara Saeed	Female	Sector G-11, Islamabad	zara.saeed@example.pk	03121234567	Arthritis	None
7	7 Ali Raza	Male	Street 8, North Nazimabad, Karachi	ali.raza@example.pk	03071234567	High Cholesterol	None
8	8 Sana Malik	Female	Block H, Gulberg, Lahore	sana.malik@example.pk	03261234567	Migraines	Seafood
9	9 Usman Tariq	Male	Sector I-8, Islamabad	usman.tariq@example.pk	03461234567	Kidney Stones	None
10	10 Nida Javed	Female	House 12, Cantt, Rawalpindi	nida.javed@example.pk	03171234567	None	Nuts

2.Doctor Table:

```
select * from Doctor;
```

Output:

DOCTORID	STAFFID	NAME	SPECIALIZATION	YEARSOFEXPERIENCE	EMAIL	CONTACTNUMBER	QUALIFICATION	DEPARTMENT
1	1	1 Dr. Imran Shah	Cardiology		15 dr.imran.shah@example.pk	03331234567	MBBS, FCPS	Cardiology
2	2	2 Dr. Ayesha Khalid	Pediatrics		12 dr.ayesha.khalid@example.pk	03451234567	MBBS, MCPS	Pediatrics
3	3	3 Dr. Omar Farooq	Nephrology		20 dr.omar.farooq@example.pk	03211234567	MBBS, FCPS	Nephrology
4	4	4 Dr. Maryam Saeed	General Surgery		18 dr.maryam.saeed@example.pk	03131234567	MBBS, MS	Surgery
5	5	5 Dr. Tariq Malik	Neurology		22 dr.tariq.malik@example.pk	03091234567	MBBS, FCPS	Neurology
6	6	6 Dr. Amina Hassan	Cardiology		19 dr.amina.hassan@example.pk	03291234567	MBBS, FCPS	Cardiology
7	7	7 Dr. Salman Aziz	Pediatrics		14 dr.salman.aziz@example.pk	03481234567	MBBS, MCPS	Pediatrics
8	8	8 Dr. Shireen Ahmed	Orthopedics		25 dr.shireen.ahmed@example.pk	03181234567	MBBS, MS	Orthopedics
9	9	9 Dr. Faisal Khan	Plastic Surgery		20 dr.faisal.khan@example.pk	03371234567	MBBS, MS	Plastic Surgery
10	10	10 Dr. Saima Noor	Gynecology		16 dr.saima.noor@example.pk	03061234567	MBBS, FCPS	Gynecology

3.Staff Table:

```
select * from Staff;
```

Output:

STAFFID	PATIENTID	NAME	ROLE	CONTACTNUMBER	EMAIL	SHIFTTIMING	SALARY	DEPARTMENT
1	1	1 Sara Khan	Nurse	03481234567	sara.khan@example.pk	Day	70000	Emergency
2	2	2 Ali Haider	Lab Technician	03191234567	ali.haider@example.pk	Night	65000	Pathology
3	3	3 Rabia Qureshi	Receptionist	03351234567	rabia.qureshi@example.pk	Day	40000	Front Desk
4	4	(null) Fahad Malik	Admin	03031234567	fahad.malik@example.pk	Day	80000	Management
5	5	4 Hira Jamil	Nurse	03281234567	hira.jamil@example.pk	Night	72000	Pediatrics

4.Appointment Table:

```
select * from Appointment;
```

Output:

	APPOINTMENTID	PATIENTID	DOCTORID	APPOINTMENTDATE	APPOINTMENTTIME	STATUS	REASONFORVISIT
1	1	1	1	1 01-DEC-24	10:00 AM	Scheduled	Routine Checkup
2	2	2	2	2 02-DEC-24	11:00 AM	Completed	Follow-up
3	3	3	3	3 03-DEC-24	2:00 PM	Canceled	Consultation
4	4	4	4	4 04-DEC-24	9:30 AM	Scheduled	Surgery Consultation
5	5	5	5	5 05-DEC-24	3:00 PM	Completed	Neurology Checkup
6	6	6	6	6 06-DEC-24	1:30 PM	Scheduled	Heart Monitoring
7	7	7	7	7 07-DEC-24	4:00 PM	Scheduled	Pediatric Vaccination
8	8	8	8	8 08-DEC-24	8:30 AM	Completed	Surgical Follow-up
9	9	9	9	9 09-DEC-24	10:30 AM	Canceled	Plastic Surgery Consultation
10	10	10	10	10 10-DEC-24	12:00 PM	Scheduled	Orthopedic Consultation

5.Medical Record Table:

```
select * from MedicalRecord;
```

Output:

	RECORDID	PATIENTID	DOCTORID	DIAGNOSIS	TREATMENT	PRESCRIPTIONS	TESTRESULTS	DATEOFVISIT
1	1	1	1	1 Hypertension	Lifestyle modification, Medication	Amlodipine 5mg	Normal BP readings	10-JAN-24
2	2	2	2	2 Pediatric Cold	Rest, Fluids	Paracetamol 250mg	Normal recovery	15-JAN-24
3	3	3	3	3 Kidney Stones	Surgery	Painkillers	Stone removed successfully	01-FEB-24
4	4	4	4	4 Appendicitis	Appendectomy	Post-op antibiotics	Surgical recovery	05-MAR-24
5	5	5	5	5 Migraine	Avoid triggers, Pain relief	Sumatriptan 50mg	Symptoms controlled	20-MAR-24
6	6	6	6	6 Heart Disease	Stent placement	Aspirin 75mg	Improved heart function	12-APR-24
7	7	7	7	7 Childhood Vaccination	Vaccination	N/A	All vaccines completed	18-APR-24
8	8	8	8	8 Post-Surgery Recovery	Physiotherapy	Pain relief medication	Normal mobility restored	10-MAY-24
9	9	9	9	9 Burn Scar Removal	Plastic Surgery	Scar healing gel	Improved scar appearance	15-JUN-24
10	10	10	10	10 Knee Injury	Surgery, Physiotherapy	Painkillers	Strength regained	30-JUN-24

6.Billing Table:

```
select * from Billing;
```

Output:

	BILLINGID	PATIENTID	APPOINTMENTID	TOTALAMOUNT	PAYMENTSTATUS	BILLINGDATE
1	1	1	1	1000	Paid	11-JAN-24
2	2	2	2	500	Paid	16-JAN-24
3	3	3	3	3000	Unpaid	02-FEB-24
4	4	4	4	2000	Paid	06-MAR-24
5	5	5	5	700	Paid	21-MAR-24
6	6	6	6	5000	Paid	13-APR-24
7	7	7	7	200	Paid	19-APR-24
8	8	8	8	1500	Unpaid	11-MAY-24
9	9	9	9	4000	Paid	16-JUN-24
10	10	10	10	2500	Paid	01-JUL-24

7. Pharmacy Table:

```
select * from Pharmacy;
```

Output:

	PHARMACYID	STAFFID	MEDICINENAME	MEDICINECODE	EXPIRYDATE	QUANTITYAVAILABLE	PRICE	PRESCRIPTIONREQUIRED
1	1	1	Paracetamol	P001	01-JAN-25	500	5	No
2	2	2	Amoxicillin	A002	01-MAR-25	300	10	Yes
3	3	3	Ibuprofen	I003	01-MAY-25	400	8	No
4	4	4	Metformin	M004	01-JUL-25	200	15	Yes
5	5	5	Lisinopril	L005	01-SEP-25	100	12	Yes

QUERIES:

SELECTING ALL COLUMNS:

```
SELECT *  
FROM Patient;
```

ARITHMETIC OPERATOR QUERY:

```
SELECT Name, LENGTH(Name) * 2 AS NameLengthDoubled  
FROM Patient;
```

CONCATENATED QUERY:

```
SELECT Name || ' (' || Gender || ')' AS FullName  
FROM Patient;
```

ALTERNATE QOUTE (Q) OPERATOR:

```
SELECT Name || q'[ has the medical condition: ]' || MedicalHistory AS PatientCondition  
FROM Patient;
```

DISTINCT QUERY:

```
SELECT DISTINCT Allergies  
FROM Patient;
```

DESCRIBE QUERY:

```
DESCRIBE Patient;
```

DISPLAYING DATA:

```
SELECT Name AS Patient_Name, Email AS Patient_Email  
FROM Patient;
```

WHERE QUERY:

```
SELECT Name, PatientID
FROM Patient
WHERE PatientID = 3;
```

BETWEEN QUERY:

```
SELECT PatientID
FROM Patient
WHERE PatientID BETWEEN 3 AND 6;
```

LIKE QUERY:

```
SELECT Name
FROM Patient
WHERE Name LIKE 'A%';
```

ORDERED BY AND IN QUERY(DESC):

```
---ACTIVITY 9
--Retrieve PatientID, name, and email of patients sorted by PatientID in descending order:
SELECT PatientID, Name, Email
FROM Patient
ORDER BY PatientID DESC;
```

SINGLE-AMPERSAND SUBSTITUTION VARIABLE:

```
SELECT Name, Email
FROM Patient
WHERE PatientID = &PatientID;
```

INITCAP QUERY:

```
SELECT DoctorID, INITCAP(Name) AS FormattedName,
       INITCAP(Department) AS FormattedDepartment
FROM Doctor WHERE DoctorID = 5;
```

MOD QUERY:

```
SELECT Name, PatientID, MOD(PatientID, 3) AS "Remainder"
FROM Patient
WHERE LENGTH(ContactNumber) = 11;
```

TRUNC AND ROUND QUERY:

```
SELECT TRUNC(Price, 2), ROUND(Price, 0)
FROM Pharmacy;
```

CONTAIN QUERY:

```
SELECT PatientID, Name, MedicalHistory,  
       LENGTH(MedicalHistory) AS "History Length",  
       INSTR(MedicalHistory, 'Asthma') AS "Contains 'Asthma'"  
FROM Patient;
```

MONTH BETWEEN QUERY:

```
SELECT PatientID, Name,  
       TO_DATE('1990-01-01', 'YYYY-MM-DD') AS DateOfBirth,  
       MONTHS_BETWEEN(SYSDATE, TO_DATE('1990-01-01', 'YYYY-MM-DD')) AS "Age in Months",  
       ADD_MONTHS(TO_DATE('1990-01-01', 'YYYY-MM-DD'), 12) AS "First Birthday"  
FROM Patient;
```

NVL QUERY:

```
SELECT Name, NVL(MedicalHistory, 'No History') AS "Medical History"  
FROM Patient;
```

NVL 2 QUERY:

```
--2. Checking for Missing Phone Numbers  
SELECT Name, NVL2(ContactNumber, 'Has Phone', 'No Phone') AS "Phone Status"  
FROM Patient;
```

COUNT QUERY:

```
SELECT COUNT(*)  
FROM Patient  
WHERE ContactNumber IS NOT NULL;
```

COUNT DISTINCT MEDICALHISTORY QUERY:

```
SELECT COUNT(DISTINCT MedicalHistory)  
FROM Patient;
```

AVERAGE QUERY:

```
SELECT AVG(LENGTH(Email))  
FROM Patient;
```

GROUP BY QUERY:

```
SELECT Address, AVG(PatientID)  
FROM Patient  
GROUP BY Address;
```

GROUP BY ADDRESS AND GENDER:

```
SELECT Address, Gender, COUNT(*)  
FROM Patient  
GROUP BY Address, Gender  
ORDER BY Address;
```

HAVING QUERY:

```
SELECT Address, AVG(PatientID)  
FROM Patient  
GROUP BY Address  
HAVING AVG(PatientID) > 5;
```

LIKE USING GROUP BY:

```
SELECT Gender, COUNT(*) AS NumberOfPatients  
FROM Patient  
WHERE Address LIKE '%Karachi%'  
GROUP BY Gender;
```

JOINS:

NATURAL JOIN QUERY:

```
SELECT AppointmentID, TotalAmount, PaymentStatus, BillingDate  
FROM Appointment NATURAL JOIN Billing  
WHERE Status = 'Completed';
```

OUTPUT:

	APPOINTMENTID	TOTALAMOUNT	PAYMENTSTATUS	BILLINGDATE
1	2	500	Paid	16-JAN-24
2	5	700	Paid	21-MAR-24
3	8	1500	Unpaid	11-MAY-24

USING CLAUSE:

```
SELECT DoctorID, Name, Specialization, AppointmentID  
FROM Doctor  
JOIN Appointment USING (DoctorID);
```

OUTPUT:

	DOCTORID	NAME	SPECIALIZATION	APPOINTMENTID
1	1	Dr. Imran Shah	Cardiology	1
2	2	Dr. Ayesha Khalid	Pediatrics	2
3	3	Dr. Omar Farooq	Nephrology	3
4	4	Dr. Maryam Saeed	General Surgery	4
5	5	Dr. Tariq Malik	Neurology	5
6	6	Dr. Amina Hassan	Cardiology	6
7	7	Dr. Salman Aziz	Pediatrics	7
8	8	Dr. Shireen Ahmed	Orthopedics	8
9	9	Dr. Faisal Khan	Plastic Surgery	9
10	10	Dr. Saima Noor	Gynecology	10

ON QUERY:

```
SELECT p.Name AS PatientName, d.Name AS DoctorName, d.Specialization
FROM Patient p
JOIN Appointment a ON p.PatientID = a.PatientID
JOIN Doctor d ON a.DoctorID = d.DoctorID;
```

OUTPUT:

	PATIENTNAME	DOCTORNAME	SPECIALIZATION
1	Ahmed Khan	Dr. Imran Shah	Cardiology
2	Ayesha Ali	Dr. Ayesha Khalid	Pediatrics
3	Bilal Ahmed	Dr. Omar Farooq	Nephrology
4	Fatima Siddiqui	Dr. Maryam Saeed	General Surgery
5	Hassan Qureshi	Dr. Tariq Malik	Neurology
6	Zara Saeed	Dr. Amina Hassan	Cardiology
7	Ali Raza	Dr. Salman Aziz	Pediatrics
8	Sana Malik	Dr. Shireen Ahmed	Orthopedics
9	Usman Tariq	Dr. Faisal Khan	Plastic Surgery
10	Nida Javed	Dr. Saima Noor	Gynecology

THREE WAY JOINS:

```
SELECT p.Name AS PatientName, d.Name AS DoctorName, b.TotalAmount, b.PaymentStatus
FROM Patient p
JOIN Appointment a ON p.PatientID = a.PatientID
JOIN Doctor d ON a.DoctorID = d.DoctorID
JOIN Billing b ON a.AppointmentID = b.AppointmentID;
```

OUTPUT:

	PATIENTNAME	DOCTORNAME	TOTALAMOUNT	PAYMENTSTATUS
1	Ahmed Khan	Dr. Imran Shah	1000	Paid
2	Ayesha Ali	Dr. Ayesha Khalid	500	Paid
3	Bilal Ahmed	Dr. Omar Farooq	3000	Unpaid
4	Fatima Siddiqui	Dr. Maryam Saeed	2000	Paid
5	Hassan Qureshi	Dr. Tariq Malik	700	Paid
6	Zara Saeed	Dr. Amina Hassan	5000	Paid
7	Ali Raza	Dr. Salman Aziz	200	Paid
8	Sana Malik	Dr. Shireen Ahmed	1500	Unpaid
9	Usman Tariq	Dr. Faisal Khan	4000	Paid
10	Nida Javed	Dr. Saima Noor	2500	Paid

ADDITIONAL CONDITION TO A JOIN QUERY:

```
SELECT p.Name AS PatientName, d.Name AS DoctorName, a.AppointmentDate
FROM Patient p
JOIN Appointment a ON p.PatientID = a.PatientID
JOIN Doctor d ON a.DoctorID = d.DoctorID
WHERE d.Specialization = 'Cardiology' AND a.Status = 'Scheduled';
```

OUTPUT:

	PATIENTNAME	DOCTORNAME	APPOINTMENTDATE
1	Ahmed Khan	Dr. Imran Shah	01-DEC-24
2	Zara Saeed	Dr. Amina Hassan	06-DEC-24

SELF-JOIN QUERY:

```
SELECT d1.Name AS DoctorName, d2.Name AS HeadName, d2.Qualification AS HeadQualification
FROM Doctor d1
JOIN Doctor d2 ON d1.Department = d2.Department AND d2.Specialization = 'Neurology'
WHERE d1.YearsOfExperience < 50;
```

OUTPUT:

	DOCTORNAME	HEADNAME	HEADQUALIFICATION
1	Dr. Tariq Malik	Dr. Tariq Malik	MBBS, FCPS

NON-EQUIJOIN QUERY:

```
SELECT s.Name AS StaffName, s.Salary, d.Department
FROM Staff s
JOIN Doctor d
ON s.Department = d.Department
WHERE s.Salary BETWEEN 50000 AND 80000;
```


OUTPUT:

	STAFFNAME	SALARY	DEPARTMENT
1	Hira Jamil	72000	Pediatrics
2	Hira Jamil	72000	Pediatrics

LEFT-OUTER JOIN:

```
SELECT p.Name AS PatientName, a.AppointmentID, a.AppointmentDate
FROM Patient p
LEFT OUTER JOIN Appointment a ON p.PatientID = a.PatientID;
```

OUTPUT:

	PATIENTNAME	APPOINTMENTID	APPOINTMENTDATE
1	Ahmed Khan	1	01-DEC-24
2	Ayesha Ali	2	02-DEC-24
3	Bilal Ahmed	3	03-DEC-24
4	Fatima Siddiqui	4	04-DEC-24
5	Hassan Qureshi	5	05-DEC-24
6	Zara Saeed	6	06-DEC-24
7	Ali Raza	7	07-DEC-24
8	Sana Malik	8	08-DEC-24
9	Usman Tariq	9	09-DEC-24
10	Nida Javed	10	10-DEC-24

RIGHT-OUTER JOIN:

```
SELECT d.Name AS DoctorName, a.AppointmentID
FROM Doctor d
RIGHT OUTER JOIN Appointment a ON d.DoctorID = a.DoctorID;
```

OUTPUT:

	DOCTORNAME	APPOINTMENTID
1	Dr. Imran Shah	1
2	Dr. Ayesha Khalid	2
3	Dr. Omar Farooq	3
4	Dr. Maryam Saeed	4
5	Dr. Tariq Malik	5
6	Dr. Amina Hassan	6
7	Dr. Salman Aziz	7
8	Dr. Shireen Ahmed	8
9	Dr. Faisal Khan	9
10	Dr. Saima Noor	10

FULL OUTER JOIN:

```
SELECT p.Name AS PatientName, b.BillingID, b.TotalAmount  
FROM Patient p  
FULL OUTER JOIN Billing b ON p.PatientID = b.PatientID;
```

OUTPUT:

	PATIENTNAME	BILLINGID	TOTALAMOUNT
1	Ahmed Khan	1	1000
2	Ayesha Ali	2	500
3	Bilal Ahmed	3	3000
4	Fatima Siddiqui	4	2000
5	Hassan Qureshi	5	700
6	Zara Saeed	6	5000
7	Ali Raza	7	200
8	Sana Malik	8	1500
9	Usman Tariq	9	4000
10	Nida Javed	10	2500

CROSS JOINS:

```
SELECT d.Name AS DoctorName, m.MedicineName  
FROM Doctor d  
CROSS JOIN Pharmacy m;
```

OUTPUT:

DOCTORNAME	MEDICINENAME	DOCTORNAME	MEDICINENAME
1 Dr. Imran Shah	Paracetamol	21 Dr. Imran Shah	Ibuprofen
2 Dr. Ayesha Khalid	Paracetamol	22 Dr. Ayesha Khalid	Ibuprofen
3 Dr. Omar Farooq	Paracetamol	23 Dr. Omar Farooq	Ibuprofen
4 Dr. Maryam Saeed	Paracetamol	24 Dr. Maryam Saeed	Ibuprofen
5 Dr. Tariq Malik	Paracetamol	25 Dr. Tariq Malik	Ibuprofen
6 Dr. Amina Hassan	Paracetamol	26 Dr. Amina Hassan	Ibuprofen
7 Dr. Salman Aziz	Paracetamol	27 Dr. Salman Aziz	Ibuprofen
8 Dr. Shireen Ahmed	Paracetamol	28 Dr. Shireen Ahmed	Ibuprofen
9 Dr. Faisal Khan	Paracetamol	29 Dr. Faisal Khan	Ibuprofen
10 Dr. Saima Noor	Paracetamol	30 Dr. Saima Noor	Ibuprofen
11 Dr. Imran Shah	Amoxicillin	31 Dr. Imran Shah	Metformin
12 Dr. Ayesha Khalid	Amoxicillin	32 Dr. Ayesha Khalid	Metformin
13 Dr. Omar Farooq	Amoxicillin	33 Dr. Omar Farooq	Metformin
14 Dr. Maryam Saeed	Amoxicillin	34 Dr. Maryam Saeed	Metformin
15 Dr. Tariq Malik	Amoxicillin	35 Dr. Tariq Malik	Metformin
16 Dr. Amina Hassan	Amoxicillin	36 Dr. Amina Hassan	Metformin
17 Dr. Salman Aziz	Amoxicillin	37 Dr. Salman Aziz	Metformin
18 Dr. Shireen Ahmed	Amoxicillin	38 Dr. Shireen Ahmed	Metformin
19 Dr. Faisal Khan	Amoxicillin	39 Dr. Faisal Khan	Metformin
20 Dr. Saima Noor	Amoxicillin	40 Dr. Saima Noor	Metformin

QUERY INSIDE QUERY:

```
SELECT Name, PatientID
FROM Patient
WHERE PatientID = (SELECT PatientID FROM Staff WHERE StaffID = 1);
```

SUB QUERY GROUP BY AND HAVING:

```
SELECT AppointmentDate, MIN(AppointmentID) AS MinAppointmentID
FROM Appointment
WHERE PatientID IN
    (SELECT PatientID FROM Patient WHERE Address LIKE '%Islamabad%')
GROUP BY AppointmentDate
HAVING MIN(AppointmentID) = 1;
```

ANY QUERY:

```
SELECT AppointmentID, PatientID, AppointmentDate
FROM Appointment
WHERE AppointmentDate < ANY
    (SELECT AppointmentDate FROM Appointment WHERE DoctorID = 5)
AND DoctorID <> 5;
```

ALL QUERY:

```
SELECT AppointmentID, PatientID, AppointmentDate
FROM Appointment
WHERE AppointmentDate > ALL
    (SELECT AppointmentDate FROM Appointment WHERE PatientID = 1)
AND PatientID <> 1;
```

EXIST QUERY:

```
SELECT AppointmentID, PatientID, DoctorID
FROM Appointment A
WHERE EXISTS
    (SELECT 1 FROM Doctor D WHERE A.DoctorID = D.DoctorID);
```

NULL VALUES IN MULTIPLE SUBQUERIES:

```
SELECT AppointmentID
FROM Appointment
WHERE AppointmentID NOT IN
    (SELECT AppointmentID FROM Billing WHERE AppointmentID IS NOT NULL);
```

UNION QUERY:

```
SELECT BillingID AS ID, PaymentStatus AS Status
FROM Billing
UNION
SELECT PharmacyID AS ID, PrescriptionRequired AS Status
FROM Pharmacy;
```

UNION ALL QUERY:

```
SELECT BillingID AS RecordID, PaymentStatus AS Status, NULL AS ReferenceID
FROM Billing
UNION ALL
SELECT PharmacyID AS RecordID, PrescriptionRequired AS Status, StaffID AS ReferenceID
FROM Pharmacy
ORDER BY RecordID;
```

INTERSECT QUERY:

```
SELECT StaffID AS ID
FROM Staff
INTERSECT
SELECT StaffID AS ID
FROM Doctor;
```

MINUS QUERY

```
SELECT PatientID AS ID
FROM Billing
INTERSECT
SELECT StaffID AS ID
FROM Pharmacy;
```

ORDER BY CLAUSE IN SET OPERATIONS:

```
SELECT BillingID AS ID, PatientID AS "ID_Type", TotalAmount AS "Amount"
FROM Billing
UNION
SELECT PharmacyID AS ID, StaffID AS "ID_Type", 0 AS "Amount"
FROM Pharmacy
ORDER BY 2;
```

INSERTING QUERY:

```
--Activity 1: Inserting New Rows
INSERT INTO patient_payment VALUES (25, 'Maria Saeed', 'RX909', 310,
TO_DATE('12-11-2024', 'DD-MM-YYYY'), 'Credit Card', '6666777788889999', 'Completed', 'Requested private room');

---Activity 2: Inserting Rows with Null Value
INSERT INTO patient_payment VALUES (27, null, 'RX909', 310,
TO_DATE('12-11-2024', 'DD-MM-YYYY'), 'Credit Card', '6666777788889999', 'Completed', 'Requested private room');

---Activity 3: Inserting Special Values
INSERT INTO patient_payment(payment_id, payment_method, card_number, status, comments)
VALUES (26, 'Credit Card', '6666777788889999', 'Completed', 'Requested private room');

---Activity 4: Inserting Specific Date and Time Values
INSERT INTO patient_payment
VALUES (28, 'Maria Saeed', 'RX909', 310, TO_DATE('12-11-2024', 'DD-MM-YYYY'),
'Credit Card', '6666777788889999', 'Completed', 'Requested private room');

--Activity 5: Creating a Script
select* from patient_payment;
INSERT INTO patient_payment(payment_id, payment_method, card_number, status, comments)
VALUES (&payment_id, &payment_method, &card_number, &status, &comments);

---Activity 7: Updating Rows in a Table
UPDATE patient_payment2
SET status = 'Not Completed'
WHERE payment_method = 'Credit Card';
```

```

---Activity 8: Updating Two Columns with a Subquery
UPDATE patient_payment2
SET (payment_id, amount) = (
    SELECT payment_id, amount
    FROM patient_payment
    WHERE payment_id = 25
)
WHERE payment_id = 25;

---Activity 10: Deleting a Row from a Table
DELETE FROM patient_payment2
WHERE payment_id = 27;

----Activity 12: Efficient Method of Emptying a Table
TRUNCATE TABLE patient_payment2;

```

DOCSSSS1 TABLE:

```

CREATE TABLE Docssssl (
    DoctorID NUMBER (6) CONSTRAINT docsl_doctor_id_pk PRIMARY KEY,
    DoctorName VARCHAR(100),
    Specialization VARCHAR(100),
    ContactNumber VARCHAR(15),
    Salary NUMBER(8,2) CONSTRAINT doctor_salary_min CHECK (Salary > 10000),
    Qualification VARCHAR(50),
    Department VARCHAR(100),
    PatientID INT,
    FOREIGN KEY(PatientID) REFERENCES Patient(PatientID)
);
drop table Docssssl;
INSERT INTO Docssssl VALUES (01, 'Dr. Abdullah Sheikh', 'Cardiologist', 03211234567,50000, 'MBBS', 'Cardiology',1);
INSERT INTO Docssssl VALUES (02, 'Dr. Asma Javed', 'Dermatologist', 03021234568,60000, 'MBBS', 'Dermatology',2);
INSERT INTO Docssssl VALUES (03, 'Dr. Kamran Abbas', 'Neurologist', 03451234569,70000, 'MBBS', 'Neurology',3);
INSERT INTO Docssssl VALUES (04, 'Dr. Nadia Aziz', 'Pediatrician', 03121234570,80000, 'MBBS', 'Pediatrics',4);
INSERT INTO Docssssl VALUES (05, 'Dr. Rizwan Ahmed', 'Orthopedic', 03041234571,90000, 'MBBS','Orthopedics',5);
Select * FROM Docssssl;

```

VIEWS:

```

CREATE VIEW lowSalary AS
SELECT *
FROM ward_assistant_
WHERE salary < 20000;

CREATE VIEW allAssistants AS
SELECT first_name, last_name
FROM ward_assistant_;

CREATE VIEW lowSalAssistantList AS
SELECT first_name, last_name
FROM ward_assistant_
WHERE salary < 20000;

```

```
CREATE VIEW deptEmployee AS  
SELECT departments.department_name, employees.first_name  
FROM departments  
INNER JOIN employees  
ON departments.department_id = employees.department_id;
```

OUTPUT:

```
View LOWSALARY created.
```

```
View ALLASSISTANTS created.
```

```
View LOWSALASSISTANTLIST created.
```

```
View DEPTEMPLOYEE created.
```