

DBMS LAB ASSIGNMENT 4

NAME – AYAAN KHAN

REG NO – 19BCS013

1. Write 5 Nested Queries for your respective database- the queries should not be very similar like just changing the where clause or just building all the queries on only one or two tables etc. The queries should make sense, it should cover most part of your database tables.

The screenshot shows a SQL IDE window titled 'NESTED.sql - local...EDATOR\ayaan (56)'. It contains five nested SQL queries. Below the queries, the 'Results' tab is active, displaying five tables of data corresponding to the queries. The status bar at the bottom indicates 'Query executed successfully.' and 'localhost (15.0 RTM) | PREDATOR\ayaan (56) | Hospital | 00:00:00 | 5 rows'.

```
SELECT * FROM dbo.T1_Ward
WHERE doctor_id IN ( SELECT doctor_id FROM dbo.T1_Doctor WHERE doctor_degree = 'MBBS' );

SELECT * FROM dbo.T1_Doctor
WHERE doctor_id IN ( SELECT doctor_id FROM dbo.T1_Patient WHERE ward_id IN ( SELECT ward_id FROM dbo.T1_Ward where ward_type = 'ICU' ));

SELECT * FROM dbo.T1_Patient
WHERE doctor_id IN ( SELECT doctor_id FROM dbo.T1_Doctor WHERE doctor_phone IN ( SELECT doctor_phone FROM dbo.T1_Doctor where doctor_phone = 0123456789 ));

SELECT * FROM dbo.T1_Discharge
WHERE patient_id IN ( SELECT patient_id FROM dbo.T1_Patient WHERE doctor_id IN ( SELECT doctor_id FROM dbo.T1_Doctor where doctor_degree = 'MBBS' ));

SELECT * FROM dbo.T1_MedicalRecord
WHERE patient_id IN ( SELECT patient_id FROM dbo.T1_Patient WHERE gender IN ( SELECT gender FROM dbo.T1_Patient ));
```

ward_id	ward_no	ward_type	doctor_id
1	12	ICU	117

doctor_id	doctor_name	doctor_address	doctor_degree	doctor_phone
117	ABHISHEK	UP	MBBS	123456789

patient_id	name	phone	gender	address	disease	doctor_id	ward_id
1001	Ravi	123456789	MALE	RAJ	Cancer	117	1

discharge_id	discharge_date	payment_type	patient_id
1	1894-07-08 00:00:00.000	UPI	1001

record_id	date	problem	patient_id	blood_group
1	1894-07-01 00:00:00.000	Ulcer	1001	A

2. Illustrate how we can use Concat and As operators in SQL (minimum 3 queries)

SQLQuery8.sql - lo...EDATOR\ayaan (51)*

```

SELECT CONCAT ( doctor_name, ' ', doctor_address) AS doctor_name FROM dbo.T1_Doctor;

SELECT CONCAT ( discharge_id, '*', payment_type) AS discharge_id FROM dbo.T1_Discharge;

SELECT CONCAT ( phone, '(', gender, ')') AS phone FROM dbo.T1_Patient;

```

100 %

Results Messages

doctor_name	
1	ABHISHEK UP
2	ADITYA UP
3	AKARSH UP
4	ARJUN UP
5	BUMRAH UP
6	DINESH UP
7	DIVESH UP
8	DIVYA UP
9	JAMES NZ

discharge_id	
1	1*UPI

phone	
1	123456789(MALE)

Query executed successfully. | localhost (15.0 RTM) | PREDATOR\ayaan (51) | Hospital | 00:00:00 | 22 rows

3. Illustrate all the Comparison operator (2 queries for each operator)

SQLQuery9.sql - lo...EDATOR\ayaan (51)*

```

SELECT * FROM dbo.T1_Doctor where doctor_id <= 102;
SELECT * FROM dbo.T1_Doctor where doctor_id <= 105;

SELECT * FROM dbo.T1_Ward where ward_id >= 1;
SELECT * FROM dbo.T1_Ward where ward_id >= 0;

SELECT * FROM dbo.T1_Doctor where doctor_name = 'KRISH';
SELECT * FROM dbo.T1_Doctor where doctor_id = 105;

SELECT * FROM dbo.T1_Doctor where doctor_id <= 102;
SELECT * FROM dbo.T1_Doctor where doctor_id <= 105;

SELECT * FROM dbo.T1_Ward where ward_id != 102;
SELECT * FROM dbo.T1_Ward where ward_type != 'normal';

```

100 %					
Results Messages					
doctor_id	doctor_name	doctor_address	doctor_degree	doctor_phone	
1	101	ARJUN	UP	MBBS	123456789
2	102	JAMES	NZ	MBBS	123456789
doctor_id	doctor_name	doctor_address	doctor_degree	doctor_phone	
1	101	ARJUN	UP	MBBS	123456789
2	102	JAMES	NZ	MBBS	123456789
3	103	RAJ	UP	MBBS	123456789
4	104	DINESH	UP	MBBS	123456789
5	105	KRISH	UP	MBBS	123456789
ward_id	ward_no	ward_type	doctor_id		
1	1	12	ICU	117	
ward_id	ward_no	ward_type	doctor_id		
1	1	12	ICU	117	
doctor_id	doctor_name	doctor_address	doctor_degree	doctor_phone	
1	105	KRISH	UP	MBBS	123456789
doctor_id	doctor_name	doctor_address	doctor_degree	doctor_phone	
1	105	KRISH	UP	MBBS	123456789
doctor_id	doctor_name	doctor_address	doctor_degree	doctor_phone	
1	101	ARJUN	UP	MBBS	123456789
2	102	JAMES	NZ	MBBS	123456789
doctor_id	doctor_name	doctor_address	doctor_degree	doctor_phone	
1	101	ARJUN	UP	MBBS	123456789
2	102	JAMES	NZ	MBBS	123456789
3	103	RAJ	UP	MBBS	123456789
4	104	DINESH	UP	MBBS	123456789
5	105	KRISH	UP	MBBS	123456789
ward_id	ward_no	ward_type	doctor_id		
1	1	12	ICU	117	
ward_id	ward_no	ward_type	doctor_id		
1	1	12	ICU	117	

Query executed successfully. localhost (15.0 RTM) | PREDATOR\ayaan (51) | Hospital | 00:00:00 | 20 rows

4. Illustrate Logical operators except ANY, ALL and Like (2 queries for each operator)

```
LOG.sql - localhos...EDATOR\ayaan (51)
SELECT * FROM dbo.T1_Doctor WHERE doctor_name IN('ARJUN', 'Sreya');
SELECT * FROM dbo.T1_Doctor WHERE doctor_id IN(102,103,104);

SELECT * FROM dbo.T1_Doctor WHERE doctor_name NOT IN('ARJUN', 'Sreya');
SELECT * FROM dbo.T1_Doctor WHERE doctor_id NOT IN(102,103,104);

SELECT * FROM dbo.T1_Doctor WHERE doctor_id between 100 and 105;
SELECT * FROM dbo.T1_Patient WHERE Patient_id between 1000 and 1050;

SELECT * FROM dbo.T1_Doctor WHERE doctor_name = 'ARJUN' or doctor_name = 'RAJ';
SELECT * FROM dbo.T1_Ward WHERE ward_id = 1 or ward_no = 1;
```

100 %

ResultsMessages

doctor_id	doctor_name	doctor_address	doctor_degree	doctor_phone	
1	101	ARJUN	UP	MBBS	123456789
2	119	SREYA	UP	MBBS	123456789

doctor_id	doctor_name	doctor_address	doctor_degree	doctor_phone	
1	102	JAMES	NZ	MBBS	123456789
2	103	RAJ	UP	MBBS	123456789
3	104	DINESH	UP	MBBS	123456789

doctor_id	doctor_name	doctor_address	doctor_degree	doctor_phone	
1	117	ABHISHEK	UP	MBBS	123456789
2	112	ADITYA	UP	MBBS	123456789
3	106	AKARSH	UP	MBBS	123456789
4	115	BUMRAH	UP	MBBS	123456789
5	104	DINESH	UP	MBBS	123456789
6	107	DIVESH	UP	MBBS	123456789
7	118	DIVYA	UP	MBBS	123456789
8	102	JAMES	NZ	MBBS	123456789

doctor_id	doctor_name	doctor_address	doctor_degree	doctor_phone	
4	101	ARJUN	UP	MBBS	123456789
5	115	BUMRAH	UP	MBBS	123456789
6	107	DIVESH	UP	MBBS	123456789
7	118	DIVYA	UP	MBBS	123456789
8	111	JAY	UP	MBBS	123456789
9	105	KRISH	UP	MBBS	123456789
10	108	RAJESH	UP	MBBS	123456789
11	113	RON	UK	MBBS	123456789

doctor_id	doctor_name	doctor_address	doctor_degree	doctor_phone	
1	101	ARJUN	UP	MBBS	123456789
2	102	JAMES	NZ	MBBS	123456789
3	103	RAJ	UP	MBBS	123456789
4	104	DINESH	UP	MBBS	123456789
5	105	KRISH	UP	MBBS	123456789

patient_id	name	phone	gender	address	disease	doctor_id	ward_id	
1	1001	Ravi	123456789	MALE	RAJ	Cancer	117	1

doctor_id	doctor_name	doctor_address	doctor_degree	doctor_phone	
1	101	ARJUN	UP	MBBS	123456789

Query executed successfully.localhost (15.0 RTM) | PREDATOR\ayaan (51) | Hospital | 00:00:00 | 49 rows

	doctor_id	doctor_name	doctor_address	doctor_degree	doctor_phone
1	101	ARJUN	UP	MBBS	123456789
2	103	RAJ	UP	MBBS	123456789

	ward_id	ward_no	ward_type	doctor_id
1	1	12	ICU	117

Query executed successfully.localhost (15.0 RTM) | PREDATOR\ayaan (51) | Hospital | 00:00:00 | 49 rows