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**19BCS002**

## **DBMS Lab Assignment 4**

**Q1)** 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.

```
SELECT * from medicine
where Patient_id IN(SELECT PID from Patient
where Current_Case='Kidney Surgery');
```

```
SELECT * from Doctor
where DID IN(SELECT Assigned_doctor_id from staff
where Assigned_Room IN(SELECT RID from room
where Availability='NO'));
```

```
SELECT * from Patient
where Current_Case IN(SELECT Current_Case from Doctor
where DID IN(SELECT Assigned_doctor_id from staff
where Name='Krishna'));
```

```
SELECT * from staff
where Assigned_doctor_id IN(SELECT DID from Doctor
where Current_Case IN(SELECT Current_Case from Patient
where PID=1001));
```

```
SELECT * from room
where RID IN(SELECT Assigned_Room from staff
where Assigned_doctor_id IN(SELECT DID from Doctor
where Salary between 30000 and 40000));
```

Object Explorer

Connect

localhost (SQL Server 15.0.2000.5 -

- Databases
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs di
- XEvent Profiler

SQLQuery1.sql -...4QFO\ABHAY (61))\*

100 %

Results Messages

	Med_id	Patient_id	Cost	Quantity	Fee
1	106	1002	500	2	1000
2	109	1008	900	1	900

	DID	First_Name	Last_Name	Current_Case	DPhone_Number	Qualification	Salary
1	1	Ajay	Chauhan	Brain Surgery	1111111110	MBBS	58000
2	3	Jay	Shah	Heart Surgery	1111111112	MBBS	38000
3	5	Suresh	Rai	Kidney Surg...	1111111114	MBBS	48000
4	6	Shaan		Flu	1111111115	MBBS	48000
5	9	Sanjay	Dutt	Bone Surgery	1111111118	MBBS	28000
6	11	Shankar	Mahadev...	Kidney Surg...	1111111120	MBBS	38000
7	12	Mithesh	Jain	Liver Surgery	1111111121	MBBS	18000
8	13	Sweta	Kumari	Burns	1111111122	MBBS	48000

	PID	Patient_name	Age	PPhone_number	Current_Case	Assigned_Doctor_id
1	1007	Karthik	27	1111111136	Liver Surgery	12

	SID	Assigned_doctor_id	Name	Salary	Assigned_Room
1	2001	3	Ayush	3000	200
2	2011	3	Param	1400	215

	RID	Availability
1	200	NO
2	202	NO
3	215	NO

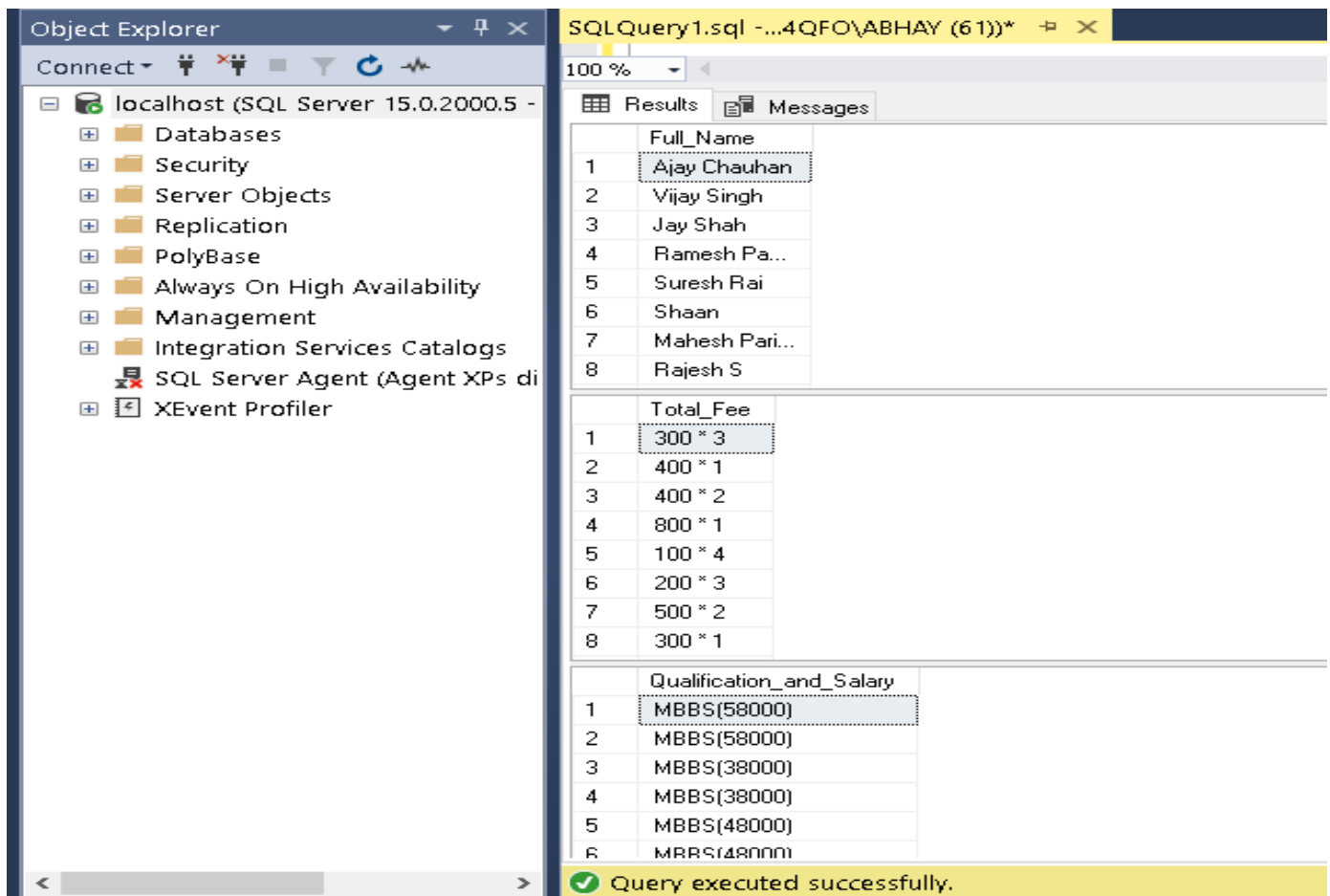
Query executed successfully.

**Q2)** Illustrate how we can use Concat and As operators in SQL.

```
SELECT CONCAT(First_Name, ' ', Last_Name) AS Full_Name from Doctor
```

```
SELECT CONCAT(Cost, ' * ', Quantity) AS Total_Fee from medicine
```

```
SELECT CONCAT(Qualification, '(' , Salary, ')') AS Qualification_and_Salary from Doctor
```



Object Explorer: localhost (SQL Server 15.0.2000.5)

SQLQuery1.sql - ...4QFO\ABHAY (61))\*

100 %

Results Messages

	Full_Name
1	Ajay Chauhan
2	Vijay Singh
3	Jay Shah
4	Ramesh Pa...
5	Suresh Rai
6	Shaan
7	Mahesh Pari...
8	Rajesh S

	Total_Fee
1	300 * 3
2	400 * 1
3	400 * 2
4	800 * 1
5	100 * 4
6	200 * 3
7	500 * 2
8	300 * 1

	Qualification_and_Salary
1	MBBS(58000)
2	MBBS(58000)
3	MBBS(38000)
4	MBBS(38000)
5	MBBS(48000)
6	MBBS(48000)

Query executed successfully.

**Q3)** Illustrate all the Comparison operator.

```
SELECT * from Doctor where Salary <= 53000;
```

```
SELECT * from Patient where Age <= 30;
```

```
SELECT * from medicine where Fee >= 500;
```

```
SELECT * from staff where Salary >= 1500;
```

```
SELECT * from room where Availability = 'YES';
```

```
SELECT * from Patient where Asssigned_Doctor_id = 9;
```

```
SELECT * from medicine where Quantity != 1;
```

```
SELECT * from room where Availability != 'YES';
```

Object Explorer

Connect

localhost (SQL Server 15.0.2000.5 -

Databases

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SQLQuery1.sql -...4QFO\ABHAY (61))\*

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Results

Messages

	DID	First_Name	Last_Name	Current_Case	DPhone_Number	Qualification	Salary
4	6	Shaan		Flu	1111111115	MBBS	48000
5	8	Rajesh	S	Kidney Surg...	1111111117	MBBS	18000
6	9	Sanjay	Dutt	Bone Surgery	1111111118	MBBS	28000
7	10	Kalpesh	Chaturvedi	Liver Surgery	1111111119	MBBS	28000
8	11	Shankar	Mahadev...	Kidney Surg...	1111111120	MBBS	38000
9	12	Mithesh	Jain	Liver Surgery	1111111121	MBBS	18000
10	13	Sweta	Kumari	Burns	1111111122	MBBS	48000
11	16	Kishore	Kumar	Skin Surgery	1111111125	MBBS	28000

	PID	Patient_name	Age	PPhone_number	Current_Case	Assigned_Doctor_id
1	1001	Abhishek	30	1111111130	Heart Surgery	3
2	1002	Akash	28	1111111131	Kidney Surgery	11
3	1003	Sundar	29	1111111132	Flu	6
4	1007	Karthik	27	1111111136	Liver Surgery	12
5	1008	Surya	26	1111111137	Kidney Surgery	5
6	1009	Maurya	23	1111111138	Artherities	15

	Med_id	Patient_id	Cost	Quantity	Fee
1	100	1001	300	3	900
2	102	1005	400	2	800
3	103	1007	800	1	800
4	105	1011	200	3	600
5	106	1002	500	2	1...
6	108	1006	700	2	1...
7	109	1008	900	1	900
8	110	1010	600	2	1

Query executed successfully.

**Q4)** Illustrate Logical operators except ANY, ALL and Like.

```
SELECT * from Doctor where Current_Case IN('Kidney
Surgery', 'Liver Surgery');
SELECT * from staff where Assigned_doctor_id IN(1, 3, 5);

SELECT * from Patient where Current_Case NOT IN('Kidney
Surgery', 'Liver Surgery', 'Flu', 'Burns');
SELECT * from medicine where Quantity NOT IN(3, 4);

SELECT * from Doctor where Salary between 20000 and 50000;
SELECT * from staff where Assigned_Room between 206 and
212;

SELECT * from Doctor where Current_Case = 'Flu' or
Current_Case = 'Burns';
SELECT * from room where RID = 205 or RID = 210;
```

Object Explorer

Connect

localhost (SQL Server 15.0.2000.5 -  
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XEvent Profiler

SQLQuery1.sql - ...4QFO\ABHAY (61))\*

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ResultsMessages

	DID	First_Name	Last_Name	Current_Case	DPhone_Number	Qualification	Salary
1	5	Suresh	Rai	Kidney Surgery	1111111114	MBBS	48000
2	8	Rajesh	S	Kidney Surgery	1111111117	MBBS	18000
3	10	Kalpesh	Chaturvedi	Liver Surgery	1111111119	MBBS	28000
4	11	Shankar	Mahadev...	Kidney Surgery	1111111120	MBBS	38000
5	12	Mithesh	Jain	Liver Surgery	1111111121	MBBS	18000

	SID	Assigned_doctor_id	Name	Salary	Assigned_Room
1	2001	3	Ayush	3000	200
2	2005	1	Malik	1000	208
3	2008	5	Sujit	2000	212
4	2011	3	Param	1400	215

	PID	Patient_name	Age	PPhone_number	Current_Case	Assigned_Doctor_id
1	1001	Abhishek	30	1111111130	Heart Surgery	3
2	1004	Mahendra	32	1111111133	Skin Surgery	16
3	1005	Mahesh	36	1111111134	Brain Surgery	1
4	1006	Rahul	31	1111111135	Bone Surgery	9
5	1009	Maurya	23	1111111138	Artherities	15
6	1011	Pawan	33	1111111140	Amnesia	14

	Med_id	Patient_id	Cost	Quantity	Fee
1	101	1003	400	1	400
2	102	1005	400	2	800
3	103	1007	800	1	800
4	106	1002	500	2	1...
5	107	1004	300	1	300

Query executed successfully.