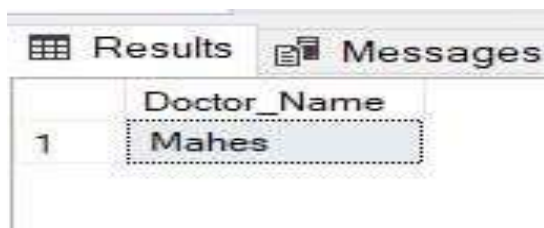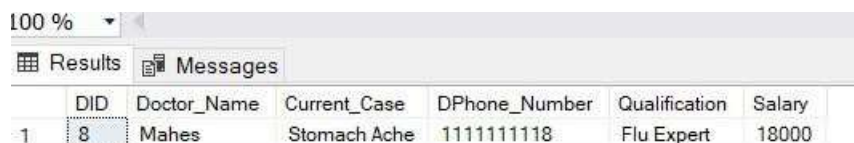# DBMS Assignment 4

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19BCS091

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.

```sql
use T8_hospital
select Doctor_Name from Doctor where DID IN
(select DID from FEE where paydate='2013-02-23');
```

	Doctor_Name
1	Mahes

```sql
use T8_hospital
select * from Doctor where DID IN
(select DID from FEE where paydate='2013-02-23');
```

	DID	Doctor_Name	Current_Case	DPhone_Number	Qualification	Salary
1	8	Mahes	Stomach Ache	1111111118	Flu Expert	18000

```sql
use T8_hospital
select * from Doctor where DID IN (select
DID from FEE where paydate IN
(select paydate from FEE where paydate >'1998-08- 19'));
```

Results | Messages

	DID	Doctor_Name	Current_Case	DPhone_Number	Qualification	Salary
1	6	Shaan	Cold	1111111116	Singer	48000
2	8	Mahes	Stomach Ache	1111111118	Flu Expert	18000
3	12	Lakshman	Nuclear Radiation	1111111130	Medical	18000

```sql
use T8_hospital
select * from Doctor where DID IN
(select DID from FEE where DID>15 or
Current_Case='Bird flu');
```

	DID	Doctor_Name	Current_Case	DPhone_Number	Qualification	Salary
1	3	Mehndi	Bird flu	1111111113	Flu Expert	38000
2	4	Bassi	Bird flu	1111111114	Bird Watcher	38000
3	16	Ken		1111111125	Stramer	28000
4	17	Buff		1111111126	Flu Expert	38000
5	18	Kalki		1111111127	Neurologist	38000

```sql
use T8_hospital select * from FEE
where DID IN
(select DID from Doctor where DID>15 and
Salary>30000);
```

	DID	Current_Case	paydate
1	17		NULL
2	18		NULL
3	19	Stress	NULL
4	20		NULL

2.Illustrate how we can select CONCAT and AS operators in SQL (minimum 3 queries)

```sql
use T8_hospital
select CONCAT('Dr. ',Doctor_Name, ' is performing
',Current_Case)AS display_work FROM Doctor;
```

	display_work
1	Dr. Abhishek Kumar is performing Covid
2	Dr. Gabru is performing Covid
3	Dr. Mehndi is performing Bird flu
4	Dr. Bassi is performing Bird flu
5	Dr. Brar is performing Fever
6	Dr. Shaan is performing Cold
7	Dr. Dawood is performing
8	Dr. Mahes is performing Stomach Ache
9	Dr. Bhangar is performing
10	Dr. Bhau is performing

```
use T8_hospital
SELECT CONCAT('Dr. ',Doctor_Name, ' is earning
',Salary)AS Salinfo FROM Doctor;
```

	Salinfo
1	Dr. Abhishek Kumar is earning 58000
2	Dr. Gabru is earning 58000
3	Dr. Mehndi is earning 38000
4	Dr. Bassi is earning 38000
5	Dr. Brar is earning 48000
6	Dr. Shaan is earning 48000
7	Dr. Dawood is earning 88000
8	Dr. Mahes is earning 18000
9	Dr. Bhangar is earning 28000
10	Dr. Bhau is earning 28000

```
use T8_hospital
select CONCAT('Operation conducted under ',(SELECT
Doctor_Name FROM Doctor WHERE Current_Case!=NULL), ' is to
be paid by ',paydate)AS Salinfo FROM FEE;
```

🔲 Results 📇 Messages

	Salinfo
1	Operation conducted under is to be paid by
2	Operation conducted under is to be paid by
3	Operation conducted under is to be paid by
4	Operation conducted under is to be paid by
5	Operation conducted under is to be paid by
6	Operation conducted under is to be paid by 2015-...
7	Operation conducted under is to be paid by
8	Operation conducted under is to be paid by 2013-...

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

use T8_hospital
select * from Doctor where DID=15;

select * from FEE where paydate='1998-08-19';

	DID	Doctor_Name	Current_Case	DPhone_Number	Qualification	Salary
1	15	Kevin	Amnosea	1111111124	Chaotic	68000

	DID	Current_Case	paydate
1	15	Amnosea	1998-08-19

use T8_hospital
select * from Doctor where DID>15;
select * from FEE where paydate>'1998-08-19';

	DID	Doctor_Name	Current_Case	DPhone_Number	Qualification	Salary
1	16	Ken		1111111125	Stramer	28000
2	17	Buff		1111111126	Flu Expert	38000
3	18	Kalki		1111111127	Neurologist	38000
4	19	Reva	Stress	1111111128	Psychologist	38000
5	20	Mercedes		1111111129	Enterprenaur	38000

	DID	Current_Case	paydate
1	6	Cold	2015-02-12
2	8	Stomach Ache	2013-02-23
3	12	Nuclear Radiation	2048-02-12

```sql
use T8_hospital
select * from Doctor where DID>=15;
select * from FEE where paydate>='1998-08-19';
```

	DID	Doctor_Name	Current_Case	DPhone_Number	Qualification	Salary
1	15	Kevin	Amnosea	1111111124	Chaotic	68000
2	16	Ken		1111111125	Stramer	28000
3	17	Buff		1111111126	Flu Expert	38000
4	18	Kalki		1111111127	Neurologist	38000
5	19	Reva	Stress	1111111128	Psychologist	38000
6	20	Mercedes		1111111129	Enterprenaur	38000

	DID	Current_Case	paydate
1	6	Cold	2015-02-12
2	8	Stomach Ache	2013-02-23
3	12	Nuclear Radiation	2048-02-12
4	15	Amnosea	1998-08-19

```sql
use T8_hospital
select * from Doctor where DID<5;
select * from FEE where paydate<'2013-02-23';
```

	DID	Doctor_Name	Current_Case	DPhone_Number	Qualification	Salary
1	1	Abhishek Kumar	Covid	123456789	Flu Expert	58000
2	2	Gabru	Covid	1111111112	Flu Expert	58000
3	3	Mehndi	Bird flu	1111111113	Flu Expert	38000
4	4	Bassi	Bird flu	1111111114	Bird Watcher	38000

	DID	Current_Case	paydate
1	15	Amnosea	1998-08-19

```sql
use T8_hospital
select * from Doctor where DID<=5;
select * from FEE where paydate<='2013-02-23';
```

	DID	Doctor_Name	Current_Case	DPhone_Number	Qualification	Salary
1	1	Abhishek Kumar	Covid	123456789	Flu Expert	58000
2	2	Gabru	Covid	1111111112	Flu Expert	58000
3	3	Mehndi	Bird flu	1111111113	Flu Expert	38000
4	4	Bassi	Bird flu	1111111114	Bird Watcher	38000
5	5	Brar	Fever	1111111115	Cook	48000

	DID	Current_Case	paydate
1	8	Stomach Ache	2013-02-23
2	15	Amnosea	1998-08-19

```sql
use T8_hospital
select * from Doctor where DID<>15;
select * from FEE where paydate<>'2048-02-12';
```

	DID	Doctor_Name	Current_Case	DPhone_Number	Qualification	Salary
10	10	Bhau		1111111120	Brother	28000
11	11	Shankar	Gas	1111111121	Tribal	38000
12	12	Lakshman	Nuclear Radiation	1111111130	Medical	18000
13	13	Sweta	Burns	1111111122	Call Center	48000
14	14	Pewds	Amnesia	1111111123	Gamer	98000
15	16	Ken		1111111125	Stramer	28000
16	17	Buff		1111111126	Flu Expert	38000
17	18	Kalki		1111111127	Neurologist	38000
18	19	Reva	Stress	1111111128	Psychologist	38000
19	20	Mercedes		1111111129	Enterprena...	38000

	DID	Current_Case	paydate
1	6	Cold	2015-02-12
2	8	Stomach Ache	2013-02-23
3	15	Amnosea	1998-08-19

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

*OR Operator

```
use T8_hospital
select * from Doctor where DID IN (select
DID from FEE where DID>15 or
Current_Case='Bird flu');
```

	DID	Doctor_Name	Current_Case	DPhone_Number	Qualification	Salary
1	3	Mehndi	Bird flu	1111111113	Flu Expert	38000
2	4	Bassi	Bird flu	1111111114	Bird Watcher	38000
3	16	Ken		1111111125	Stramer	28000
4	17	Buff		1111111126	Flu Expert	38000

```
use T8_hospital
select * from FEE where DID>15 or Current_Case='Bird flu';
```

	DID	Current_Case	paydate
1	3	Bird flu	NULL
2	4	Bird flu	NULL
3	16		NULL
4	17		NULL
5	18		NULL

*AND Operator

```
use T8_hospital select * from FEE
where DID IN
(select DID from Doctor where DID>15 and
Salary>30000);
```

	DID	Current_Case	paydate
1	17		NULL
2	18		NULL
3	19	Stress	NULL
4	20		NULL

```
use T8_hospital
select * from FEE where DID<15 and paydate<='2015-02- 12';
```

	DID	Current_Case	paydate
1	6	Cold	2015-02-12
2	8	Stomach Ache	2013-02-23

*IN Operator

```
use T8_hospital select * from FEE
where DID IN
(select DID from Doctor where DID>15 and
Salary>30000);
```

	DID	Current_Case	paydate
1	17		NULL
2	18		NULL
3	19	Stress	NULL
4	20		NULL

```
use T8_hospital
select Doctor_Name from Doctor where DID IN
(select DID from FEE where DID>15);
```

	Doctor_Name
1	Ken
2	Buff
3	Kalki
4	Reva
5	Mercedes

*BETWEEN Operator

```
use T8_hospital
select Doctor_Name from Doctor where DID BETWEEN 1 AND 5
```

	Doctor_Name
1	Abhishek Kumar
2	Gabru
3	Mehndi
4	Bassi
5	Brar

```
use T8_hospital
select Doctor_Name from Doctor where Salary BETWEEN 30000
AND 60000;
```

	Doctor_Name
1	Abhishek Kumar
2	Gabru
3	Mehndi
4	Bassi
5	Brar
6	Shaan
7	Shankar
8	Sweta
9	Buff
10	Kalki

*SOME Operator

```
use T8_hospital
SELECT * FROM Doctor where Salary > SOME(SELECT Salary
FROM Doctor where Current_Case='Bird Flu');
```

	DID	Doctor_Name	Current_Case	DPhone_Number	Qualification	Salary
1	1	Abhishek Kumar	Covid	123456789	Flu Expert	58000
2	2	Gabru	Covid	1111111112	Flu Expert	58000
3	5	Brar	Fever	1111111115	Cook	48000
4	6	Shaan	Cold	1111111116	Singer	48000
5	7	Dawood		1111111117	Drug Lord	88000

```
use T8_hospital
SELECT DOctor_Name FROM Doctor where DID = SOME(SELECT
DID FROM FEE where Qualification='Flu Expert');
```

	DOctor_Name
1	Abhishek Kumar
2	Gabru
3	Mehndi