

## **ITDIB2-B44 Assignment:**

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## Question 1:

1.1

Create Table Salary\_List

```
(  
  Id INT NOT NULL Primary Key,  
  Fname VARCHAR(30) NOT NULL,  
  Lname VARCHAR(30) NOT NULL,  
  Salary INT NULL  
);
```

1.2

INSERT into Salary\_List(Id, Fname, Lname, Salary)

VALUES

```
(0001,'Mandla','Nkosi',12000),  
(0002,'Princewill','Goodluck',28000),  
(0003,'Angelina','Duke',9000),  
(0004,'Zama','Jobert',16000),  
(0005,'James','Stone',20000),  
(0006,'Martins','Duke',30000);
```

1.3

Input:

Select \* from Salary\_List;

Select Id, Fname, Lname, Salary from Salary\_List;

```
Select * From Salary_List;
```

```
Select Id,Fname,Lname,Salary from Salary_List;
```

Output:

	Id	Fname	Lname	Salary
▶	1	Mandla	Nkosi	12000
	2	Princewill	Goodluck	28000
	3	Angelina	Duke	9000
	4	Zama	Jobert	16000
	5	James	Stone	20000
	6	Martins	Duke	30000
*	NULL	NULL	NULL	NULL

	Id	Fname	Lname	Salary
▶	1	Mandla	Nkosi	12000
	2	Princewill	Goodluck	28000
	3	Angelina	Duke	9000
	4	Zama	Jobert	16000
	5	James	Stone	20000
	6	Martins	Duke	30000
*	NULL	NULL	NULL	NULL

Salary\_List 1 × Salary\_List 2 Salary\_List 3    Salary\_List 1 Salary\_List 2 × Salary\_List 3

1.4

Input:

Select \* from Salary\_List

Where Lname LIKE '%Jobert';

```
Select * from Salary_List
Where Lname LIKE '%Jobert';
```

Output:

	Id	Fname	Lname	Salary
▶	4	Zama	Jobert	16000
*	NULL	NULL	NULL	NULL

## Question 2:

### Creation of Staff\_List Table:

Create Table Staff\_List

```
(  
  Id INT NOT NULL Primary Key,  
  Fname VARCHAR(30) NOT NULL,  
  Lname VARCHAR(30) NOT NULL,  
  Salary INT NULL  
);
```

INSERT into Staff\_List(Id, Fname, Lname, Salary)

VALUES

```
(0001,'Mandla','Nkosi',12000),  
(0002,'Princewill','Goodluck',28000),  
(0003,'Angelina','Duke',9000),  
(0004,'Zama','Jobert',16000),  
(0005,'James','Stone',20000),  
(0006,'Blessing','Seli_mont', null),  
(0007,'Brenda','Ti_tus', null),  
(0008,'Martins','Duke',30000);
```

## 2.1

Input:

Select \* from Staff\_List

Where Lname LIKE '%\\_%';

```
Select * from Staff_List
Where Lname LIKE '%\_%';
```

Output:

	Id	Fname	Lname	Salary
▶	6	Blessing	Seli_mont	NULL
	7	Brenda	Ti_tus	NULL
⌵	NULL	NULL	NULL	NULL

## 2.2

Input:

UPDATE Staff\_List

Set Lname = 'Selimont'

Where Id = 0006;

UPDATE Staff\_List

Set Lname = 'Titus'

Where Id = 0007;

Select \* from Staff\_List

```
UPDATE Staff_List
SET Lname = 'Selimont'
Where Id = 0006;

UPDATE Staff_List
SET Lname = 'Titus'
Where Id = 0007;

Select * from Staff_List
```

Output:

	Id	Fname	Lname	Salary
▶	1	Mandla	Nkosi	12000
	2	Princewill	Goodluck	28000
	3	Angelina	Duke	9000
	4	Zama	Jobert	16000
	5	James	Stone	20000
	6	Blessing	Selimont	NULL
	7	Brenda	Titus	NULL
	8	Martins	Duke	30000
⌵	NULL	NULL	NULL	NULL

Staff\_List 17 ×

## 2.3

Input:

Delete from Staff\_List

Where Id = 0006;

Delete from Staff\_List

Where Id = 0007;

```
Delete from Staff_List
```

```
Where Id = 0006;
```

```
Delete from Staff_List
```

```
Where Id = 0007;
```

```
Select * from Staff_List;
```

Output:

	Id	Fname	Lname	Salary
►	1	Mandla	Nkosi	12000
	2	Princewill	Goodluck	28000
	3	Angelina	Duke	9000
	4	Zama	Jobert	16000
	5	James	Stone	20000
	8	Martins	Duke	30000
✱	NULL	NULL	NULL	NULL

## 2.4

Input:

Select \* from Staff\_List

Where Lname LIKE 'D%'

```
Select * from Staff_List
```

```
Where Lname LIKE 'D%'
```

Output:

	Id	Fname	Lname	Salary
►	3	Angelina	Duke	9000
	8	Martins	Duke	30000
✱	NULL	NULL	NULL	NULL

2.5

Input:

Select \* from Staff\_List

Where Lname LIKE '%K%'

And Salary > 20000;

```
Select * from Staff_List
Where Lname LIKE '%K%'
And Salary > 20000;
```

Output:

	Id	Fname	Lname	Salary
▶	2	Princewill	Goodluck	28000
	8	Martins	Duke	30000
*	NULL	NULL	NULL	NULL

2.6

Input:

Select \* from Staff\_List

Where Lname LIKE '%G%'

And Salary > 20000

And Salary < 40000 ;

```
Select * from Staff_List
Where Lname LIKE '%G%'
And Salary > 20000
AND Salary < 40000;
```

Output:

	Id	Fname	Lname	Salary
▶	2	Princewill	Goodluck	28000
*	NULL	NULL	NULL	NULL



### Question 3:

3.1

Input:

Select Id, Fname, Salary from Staff\_List

Where Salary IN(10000, 20000, 30000, 40000, 50000, 60000, 70000, 80000, 90000, 100000);

```
Select Id, Fname, salary from Staff_List
Where salary IN(10000,20000,30000,40000,50000,60000,70000,80000,90000,100000);
```

Output:

	Id	Fname	salary
▶	5	James	20000
	8	Martins	30000

#### **Creation of Staff Info Table:**

Create Table Staff\_Info

(

Id INT NOT NULL Primary Key,

Fname VARCHAR(30) NOT NULL,

Lname VARCHAR(30) NOT NULL,

Salary INT NULL,

Location VARCHAR(30) NOT NULL

);

INSERT into Staff\_Info(Id, Fname, Lname, Salary, Location)

VALUES

(0001,'Mandla','Nkosi',12000,'Midrand'),

(0002,'Princewill','Goodluck',28000,'Johannesburg'),

(0003,'Angelina','Duke',9000,'Pretoria'),

(0004,'Zama','Jobert',16000,'Durban'),

(0005,'James','Stone',20000,'Cape Town'),

(0006,'Martins','Duke',30000,'Port Elizabeth');

### 3.2

Input:

Select \* from Staff\_Info

Where Salary >= 16000;

```
Select * from Staff_Info  
Where Salary >= 16000;
```

Output:

Id	Fname	Lname	Salary	Location
2	Princewill	Goodluck	28000	Johannesburg
4	Zama	Jobert	16000	Durban
5	James	Stone	20000	Cape Town
6	Martins	Duke	30000	Port Elizabeth

### 3.3

Input:

Select \* from Staff\_Info

Where Salary IN(12000, 28000, 30000);

```
Select * from Staff_Info  
Where Salary IN(12000, 28000, 30000);
```

Output:

Id	Fname	Lname	Salary	Location
1	Mandla	Nkosi	12000	Midrand
2	Princewill	Goodluck	28000	Johannesburg
6	Martins	Duke	30000	Port Elizabeth

### 3.4

Alter table Staff\_Info Modify Column Fname VARCHAR(11);

The table Staff\_Info is selected for altering, then the Fname column is selected to be modified into a VARCHAR datatype that may only contain 11 characters.

### 3.5

Input:

```
Select * from Staff_Info
```

```
Order By Lname;
```

```
Select * from Staff_Info
```

```
Order By Lname;
```

Output:

Id	Fname	Lname	Salary	Location
3	Angelina	Duke	9000	Pretoria
6	Martins	Duke	30000	Port Elizabeth
2	Princewill	Goodluck	28000	Johannesburg
4	Zama	Jobert	16000	Durban
1	Mandla	Nkosi	12000	Midrand
5	James	Stone	20000	Cape Town

### 3.6

AND: Is used to select records within a database, where two conditions must be met.

OR: Is used to select records within a database, where one or another condition is met.

%K: Is used to select records within a database, where a record starts with the letter 'K'.

%K%: Is used to select records within a database, where a record must contain the letter 'K' somewhere in it.