Basic SQL Operations Workflow

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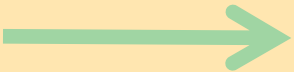
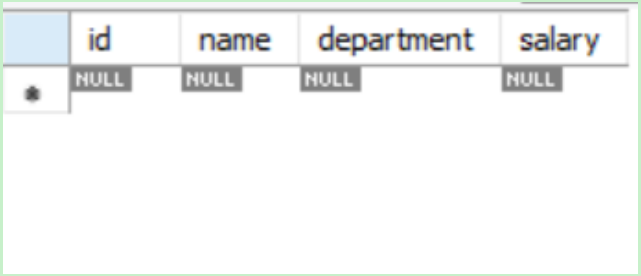
Command : **CREATE**

```sql
CREATE TABLE employees
(
    id INT PRIMARY KEY,
    name VARCHAR(50),
    department VARCHAR(50),
    salary DECIMAL(10, 2)
);
```

1. Create a table





An Empty Table is created : “**employees**”

1. Create a table

Command : **INSERT INTO**

```
INSERT INTO employees (id, name, department, salary)
    VALUES  (1, 'Israr M', 'Operations', 40000.00),
        (2, 'Ravi K', 'Sales', 50000.00),
        (3, 'Naveen T', 'Operations', 45000.00),
        (4, 'Rahul D', 'Sales', 50000.00);
```

2. Insert data

	id	name	department	salary
▶	1	Israr M	Operations	40000.00
	2	Ravi K	Sales	50000.00
	3	Naveen T	Operations	45000.00
	4	Rahul D	Sales	50000.00

Data inserted to table

2. Insert data

Command : **SELECT**

Query 1:

```
SELECT * FROM employees;
```

Query 2:

```
SELECT name, salary FROM employees;
```

3. Select data

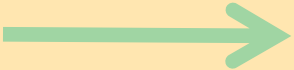
Output 1:

id	name	department	salary
1	Israr M	Operations	40000.00
2	Ravi K	Sales	50000.00
3	Naveen T	Operations	45000.00
4	Rahul D	Sales	50000.00

Output 2:

name	salary
Israr M	40000.00
Ravi K	50000.00
Naveen T	45000.00
Rahul D	50000.00

3. Select data



Command : **UPDATE**

```
UPDATE employees
SET salary = 55000.00
WHERE id = 1;
```

4. Update data

Before:

id	name	department	salary
1	Israr M	Operations	40000.00
2	Ravi K	Sales	50000.00
3	Naveen T	Operations	45000.00
4	Rahul D	Sales	50000.00

After:

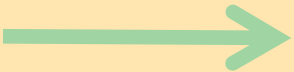
id	name	department	salary
1	Israr M	Operations	55000.00
2	Ravi K	Sales	50000.00
3	Naveen T	Operations	45000.00
4	Rahul D	Sales	50000.00

4. Update data

Command : **DELETE**

```sql
DELETE FROM employees
WHERE id = 2;
```

5. Delete data



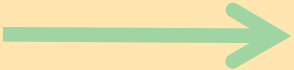
Before:

	id	name	department	salary
▶	1	Israr M	Operations	40000.00
	2	Ravi K	Sales	50000.00
	3	Naveen T	Operations	45000.00
	4	Rahul D	Sales	50000.00

After:

	id	name	department	salary
▶	1	Israr M	Operations	55000.00
	3	Naveen T	Operations	45000.00
	4	Rahul D	Sales	50000.00

5. Delete data



Command : **SELECT & WHERE**

```sql
SELECT name, salary FROM employees
WHERE salary > 50000;
```

6. Where Clause

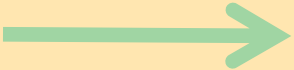
Original Table:

	id	name	department	salary
▶	1	Israr M	Operations	55000.00
	3	Naveen T	Operations	45000.00
	4	Rahul D	Sales	50000.00

Output:

	name	salary
▶	Israr M	55000.00

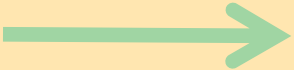
6. Where Clause



Command : **Group by**

```sql
SELECT department, AVG(salary) AS average_salary
FROM employees
GROUP BY department;
```

7. Group By



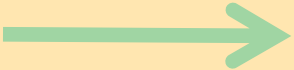
Original Table:

id	name	department	salary
1	Israr M	Operations	55000.00
3	Naveen T	Operations	45000.00
4	Rahul D	Sales	50000.00

Output:

department	average_salary
Operations	50000.000000
Sales	50000.000000

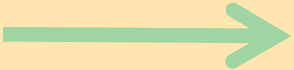
7. Group By



Command : **Group by**

```sql
SELECT department, AVG(salary) AS average_salary
FROM employees
GROUP BY department;
```

8. Order By



Original Table:

id	name	department	salary
1	Israr M	Operations	55000.00
3	Naveen T	Operations	45000.00
4	Rahul D	Sales	50000.00

Output:

name	salary
Israr M	55000.00
Rahul D	50000.00
Naveen T	45000.00

8. Order By

Keep Learning.
&
Help Others.

https://www.linkedin.com/in/israrmohammed/

Israr Mohammed