

--WELCOME TO SQL CASE STUDY--

/\* D.D.L. QUERIES \*/

--CREATE TABLE : CASE\_STUDY--

```
CREATE TABLE CASE_STUDY
(
  EID INT PRIMARY KEY NOT NULL,
  DEPARTMENT TEXT ,
  FIRST_NAME VARCHAR(15) ,
  LAST_NAME VARCHAR(15) ,
  SALARY NUMERIC ,
  JOINING_DATE DATE
);
```

-- CLEAR TABLE CONTENTS QUICKLY---

```
TRUNCATE CASE_STUDY;
```

--ALTER TABLE(FIELDS/COLUMNS)--

```
ALTER TABLE CASE_STUDY
ADD FOREIGN KEY (EID) REFERENCES Employee(EID);
```

```
ALTER TABLE CASE_STUDY
ADD EMAIL VARCHAR(255);
```

```
ALTER TABLE CASE_STUDY
DROP COLUMN EMAIL ;
```

```
ALTER TABLE CASE_STUDY
ALTER COLUMN JOINING_DATE TYPE VARCHAR(255)
USING JOINING_DATE::VARCHAR(255);
```

```
ALTER TABLE CASE_STUDY
ALTER COLUMN JOINING_DATE TYPE DATE
USING JOINING_DATE::DATE;
```

```
ALTER TABLE CASE_STUDY
RENAME COLUMN JOINING_DATE TO DATE_OF_JOINING;
```

---CREATE VIEW "VIEW\_NAME" AS---

```
CREATE VIEW CASE_RECORD AS
SELECT * FROM CASE_STUDY
ORDER BY EID ASC;
```

--DROP TABLE--

```
DROP TABLE CASE_STUDY;
```

/\* D.M.L. QUERIES \*/

---INSERT VALUES INTO A TABLE : CASE\_STUDY---

```
INSERT INTO
CASE_STUDY(EID, DEPARTMENT, FIRST_NAME, LAST_NAME, SALARY, JOINING_DATE)
VALUES
(1, 'HR', 'Sankalp', 'Waghe', 10000000, '1999-07-18'),
(2, 'ADMIN', 'Vivek', 'Khandekar', 10600000, '1989-3-4'),
(3, 'CTO', 'Swapnil', 'Pradeep', 10800000, '1995-10-17'),
```

```
(4, 'ACCOUNT', 'Mohan', 'Parmagullu', 10000000, '1996-01-10'),  
(5, 'CEO', 'Ritesh', 'Parulekar', 10800000, '1994-11-23')  
;
```

---UPDATE QUERY---

```
UPDATE CASE_STUDY  
SET FIRST_NAME = 'Prathamesh', LAST_NAME = 'Patkar'  
WHERE EID = 1;
```

```
UPDATE CASE_STUDY  
SET FIRST_NAME = 'Prathamesh', LAST_NAME = 'Patkar'  
WHERE EID = 1 AND DEPARTMENT = 'HR';
```

---DELETE FROM QUERY---

```
DELETE FROM CASE_STUDY  
WHERE FIRST_NAME = 'Prathamesh'
```

/\* D.Q.L. QUERIES \*/

---ORDER BY QUERY---

```
SELECT * FROM CASE_STUDY  
ORDER BY EID;
```

```
SELECT * FROM CASE_STUDY  
ORDER BY EID DESC;
```

---LIMIT QUERY---

```
---Select LIMITED RECORDS---  
SELECT * FROM CASE_STUDY  
ORDER BY EID  
LIMIT 3;
```

```
SELECT * FROM CASE_STUDY  
ORDER BY EID DESC  
LIMIT 3;
```

---FETCH FIRST 3 RECORDS---

```
SELECT *  
FROM CASE_STUDY  
ORDER BY EID  
FETCH FIRST 3 ROWS ONLY;
```

---OFFSET QUERY : SKIPS FIRST "Nth" RECORDS---

```
SELECT *  
FROM CASE_STUDY  
ORDER BY EID  
OFFSET 2; ---SKIP FIRST 2 RECORDS---
```

---FIND IN FIELDS THAT END WITH---

```
SELECT *  
FROM CASE_STUDY  
WHERE (LAST_NAME LIKE '%r' OR FIRST_NAME LIKE '%R');
```

---FIND IN FIELDS THAT CONTAIN---

```
SELECT *  
FROM CASE_STUDY
```

```
WHERE FIRST_NAME  
LIKE '%i%e%';
```

```
---FIND IN FIELDS THAT STARTS WITH---
```

```
SELECT *  
FROM CASE_STUDY  
WHERE FIRST_NAME  
LIKE 'R%'  
;
```

```
---GROUP BY CLAUSE---
```

```
SELECT COUNT(CASE_STUDY.FIRST_NAME) AS Count_Salaries,CASE_STUDY.SALARY AS C_S  
FROM CASE_STUDY  
GROUP BY CASE_STUDY.SALARY  
ORDER BY Count_Salaries DESC  
;
```

```
---HAVING CLAUSE---
```

```
SELECT COUNT(CASE_STUDY.FIRST_NAME) AS Count_Salaries,CASE_STUDY.SALARY AS C_S  
FROM CASE_STUDY  
GROUP BY CASE_STUDY.SALARY  
HAVING CASE_STUDY.SALARY >= 10800000  
ORDER BY Count_Salaries DESC  
;
```

```
---SUBQUERY QUANTITY/RANGE---
```

```
SELECT CASE_STUDY.FIRST_NAME,CASE_STUDY.DEPARTMENT FROM CASE_STUDY WHERE EID  
IN (SELECT Employee.EID FROM Employee WHERE EID <= 9);  
;
```

```
---BETWEEN KEYWORD FOR RANGE---
```

```
SELECT FIRST_NAME, LAST_NAME FROM CASE_STUDY WHERE EID BETWEEN 3 AND 9;
```

```
--AGGREGATE FUNCTIONS---
```

```
---SELECT MINIMUM FROM UNIT---
```

```
SELECT MIN(DATE_OF_JOINING) AS Datewise_senior  
FROM CASE_STUDY;
```

```
---SELECT MAXIMUM FROM UNIT---
```

```
SELECT MAX(DATE_OF_JOINING) AS Datewise_junior  
FROM CASE_STUDY;
```

```
---SELECT COUNT OF UNITS---
```

```
SELECT COUNT(EID) AS Count_Of_Employees  
FROM CASE_STUDY;
```

```
---SELECT AVERAGE OF UNITS---
```

```
SELECT AVG(SALARY) AS AVERAGE_C2C  
FROM CASE_STUDY;
```

```
---SELECT SUM OF UNITS---
```

```
SELECT SUM(SALARY) AS SUM_C2C  
FROM CASE_STUDY;
```

```
---JOINS---
```

```
--LEFT JOIN--
SELECT
CASE_STUDY.EID, CASE_STUDY.FIRST_NAME, CASE_STUDY.DEPARTMENT, Employee.DEPT, Employee.P
ROJECT
FROM CASE_STUDY LEFT JOIN Employee
ON CASE_STUDY.DEPARTMENT = Employee.DEPT
;
```

```
--RIGHT JOIN--
SELECT
CASE_STUDY.EID, CASE_STUDY.FIRST_NAME, CASE_STUDY.DEPARTMENT, Employee.DEPT, Employee.P
ROJECT
FROM CASE_STUDY RIGHT JOIN Employee
ON CASE_STUDY.DEPARTMENT = Employee.DEPT
;
```

```
--INNER JOIN--
SELECT
CASE_STUDY.EID, CASE_STUDY.FIRST_NAME, CASE_STUDY.DEPARTMENT, Employee.DEPT, Employee.P
ROJECT
FROM CASE_STUDY INNER JOIN Employee
ON CASE_STUDY.DEPARTMENT = Employee.DEPT
;
```

```
--FULL OUTER JOIN--
SELECT
CASE_STUDY.EID, CASE_STUDY.FIRST_NAME, CASE_STUDY.DEPARTMENT, Employee.DEPT, Employee.P
ROJECT
FROM CASE_STUDY FULL OUTER JOIN Employee
ON CASE_STUDY.DEPARTMENT = Employee.DEPT
;
```

```
--- SELECT THE CREATED TABLE ---
SELECT * FROM CASE_STUDY;
```

```
--- SELECT THE CREATED VIEW ---
SELECT * FROM CASE_RECORD;
```