**INSERT:**

INSERT INTO table\_name (column1,column2,column3,...) VALUES (value1,value2,value3,...);

**UPDATE**:

UPDATE table\_name SET column1=value1,column2=value2,... WHERE some\_column=some\_value;

**DELETE:**

DELETE FROM table\_name WHERE some\_column=some\_value;

**SELECT:**

SELECT column\_name,column\_name FROM table\_name;

**WHERE:**

SELECT column\_name,column\_name FROM table\_name WHERE column\_name operator value;

**ORDER BY:**

SELECT column\_name,column\_name FROM table\_name

ORDER BY column\_nameASC|DESC,column\_name ASC|DESC;

**LIKE:**

SELECT column\_name(s) FROM table\_name WHERE column\_name LIKE pattern;

**IN:**

SELECT column\_name(s) FROM table\_name WHERE column\_name IN (value1,value2,...);

**BETWEEN:**

SELECT column\_name(s) FROM table\_name WHERE column\_nameBETWEEN value1 AND value2;

**GROUP BY:**

SELECT column\_name, aggregate\_function(column\_name) FROM table\_name  
WHERE column\_name operator value GROUP BY column\_name;

**HAVING:**

SELECT column\_name, aggregate\_function(column\_name) FROM table\_name  
WHERE column\_name operator value GROUP BY column\_name HAVING aggregate\_function(column\_name) operator value;

**JOINS:**

**INNER JOIN**: Returns all rows when there is at least one match in BOTH tables

**LEFT JOIN**: Return all rows from the left table, and the matched rows from the right table

**RIGHT JOIN**: Return all rows from the right table, and the matched rows from the left table

**FULL JOIN**: Return all rows when there is a match in ONE of the tables

SELECT O.OrderNumber, CONVERT(date,O.OrderDate) AS Date, P.ProductName, I.Quantity, I.UnitPrice FROM [Order] O JOIN OrderItem I ON O.Id = I.OrderId JOIN Product P ON P.Id = I.ProductId ORDER BY O.OrderNumber;

**CREATE DATABASE:**

CREATE DATABASE dbname;

**CREATE TABLE :**

CREATE TABLE table\_name  
(  
column\_name1 data\_type(size),  
....  
);

**SELECT TOP:**

SELECT TOP number|percent column\_name(s)  
FROM table\_name;

**mySQL**: SELECT column\_name(s)  
FROM table\_name  
LIMIT number;

**Oracle**: SELECT column\_name(s)  
FROM table\_name  
WHERE ROWNUM <= number;

**TIME STAMP:**

SELECT \* FROM BOOKING\_SESSION WHERE TO\_CHAR (T\_SESSION\_DATETIME, 'DD-MM-YYYY') ='20-03-2012';

WHERE bk\_date >= TO\_DATE('2012-03-18', 'YYYY-MM-DD') AND bk\_date < TO\_DATE('2012-03-19', 'YYYY-MM-DD')

Today: WHERE timestamp >= CURDATE()

Yesterday: WHERE timestamp >= DATE\_SUB(CURDATE(), INTERVAL 1 DAY) AND timestamp < CURDATE()

This month: WHERE timestamp >= DATE\_SUB(CURDATE(), INTERVAL DAYOFMONTH(CURDATE())-1 DAY)

**Nth Record from Last:**

1. SELECT MAX(Salary) FROM Employee WHERE Salary NOT IN (SELECT MAX(Salary) FROM Employee )
2. SELECT \* FROM Employee Emp1 WHERE (N-1) = (SELECT COUNT(DISTINCT(Emp2.Salary)) FROM Employee Emp2 WHERE Emp2.Salary > Emp1.Salary)
3. SELECT TOP 1 Salary FROM (SELECT DISTINCT TOP N Salary FROM Employee ORDER BY Salary DESC) AS Emp ORDER BY Salary

**Unique records without using the DISTINCT keyword:**

SELECT employee\_location from employee GROUP BY employee\_location

**Maximum value without using MAX:**

SELECT DISTINCT Numbers FROM Compare WHERE Numbers NOT IN

(SELECT Smaller.Numbers FROM Compare AS Larger JOIN Compare AS Smaller ON Smaller.Numbers < Larger.Numbers)

select TOP 1 Numbers from Compare order by Numbers DESC

**Given a table TBL with a field Nmbr that has rows with the following values:**

1, 0, 0, 1, 1, 1, 1, 0, 0, 1, 0, 1, 0, 1, 0, 1

Write a query to add 2 where Nmbr is 0 and add 3 where Nmbr is 1.

update TBL set Nmbr = case when Nmbr > 0 then Nmbr+3 else Nmbr+2 end;

**How can you create an empty table from an existing table?**

Select \* into studentcopy from student where 1=2

**How to fetch common records from two tables?**

Select studentID from student. <strong>INTERSECT </strong> Select StudentID from Exam

**How to fetch alternate records from a table?**

Select studentId from (Select rowno, studentId from student) where mod(rowno,2)=0

Select studentId from (Select rowno, studentId from student) where mod(rowno,2)=1

**How to generate row number in SQL Without ROWNUM**

SELECT name, sal, (SELECT COUNT(\*) FROM EMPLOYEE i WHERE o.name >= i.name) row\_num

FROM EMPLOYEE o order by row\_num

**Get Numeric Values only using SQL ?**

SELECT REGEXP\_REPLACE(<Column Name>,[A-Za-z]) FROM <Table Name>;

**Display the employee details who joined before 5 days.**

SELECT \* FROM Employee\_Salary WHERE DATEDIFF(dd,Hire\_Date,getdate()) < 5

**SQL INJECTION:**

**Case1**: SELECT \* FROM Users WHERE UserId = 105 or 1=1

UserID: 105 or 1=1

**Case2**: SELECT \* FROM Users WHERE Name ="" or ""="" AND Pass ="" or ""=""

UserID:" or ""="

Solution: txtSQL = "INSERT INTO Customers (CustomerName,Address,City) Values(@0,@1,@2)";  
db.Execute(txtSQL,txtNam,txtAdd,txtCit);