**SQL NOTES**

Delete row: Delete from table\_name where <condition>

**Cascading Referential Integrity**

1. No action (Default option)
2. Cascade
3. NULL
4. Set Default

**Check Constraint**

Delete Constraint: Alter Table table\_name

Drop Constraint constraint\_name

Add Constraint: Alter Table table\_name

Add Constraint constraint\_name Check (Boolean expression)

**Identity Column**

Identity (Seed, Increment)

To reset identity column value,

DBCC CHECKIDENT (table\_name, RESEED, 0)

**Unique Key Constraint**

A table can have only one primary key, but more than one unique key.

Primary key does not allow nulls, where as unique allows one null.

Add unique: Alter table table\_name

Add Constraint constraint\_name Unique (column\_name)

**Retrieving Identity Column**

SCOPE\_IDENTITY () – Same session and same scope

@@IDENTITY () – Same session and across any scope

IDENT\_CURRENT (table\_name) – Specific table across any session and any scope

**Where and Having**

1. Where can be used with Select, Update, insert where as Having can only be used with Select.
2. Where filter rows before aggregation (grouping), where as Having filter groups after aggregations are performed.
3. Aggregate functions can’t be used in where clause where as they can be used in Having clause.

**Replace Null values**

ISNULL () – Returns non-null value

COALESCE () – Return first non-null value

CASE statement

CASE

WHEN expression THEN ‘ ‘ ELSE ‘ ‘

END

**Union and Union All**

1. Union removes duplicate rows, whereas UNION ALL does not
2. Union performs distinct sort to remove duplicates, which makes it slower than Union All.

Union vs Join: Union rows from 2 or more tables, whereas Join combines two or more columns based on logical relationships between table.

**Stored Procedure**

CREATE PROCEDURE OR PROC procedure\_name AS

BEGIN

<body>

END

Run Procedure: procedure\_name, EXEC procedure\_name, EXECUTE procedure\_name

**Advantages of Stored Procedures**

1. Execution plan retention and reusability.
2. Reduces network traffic.
3. Code reusability and maintainability.
4. Better security.
5. Avoids SQL Injection attack.

**String Functions**

ASCII ()

CHAR ()

LTRIM ()

RTRIM ()

LOWER ()

UPPER ()

REVERSE ()

LEN ()

LEFT ()

RIGHT ()

CHARINDEX (expression\_to\_find, expression\_to\_search, [start\_location])

SUBSTRING (expression, start, length)

REPLICATE (string\_to\_be\_replicated, no\_of\_times\_replicate)

SPACE (no\_of\_spaces)

PATINDEX (pattern, expression)

REPLACE (string, pattern\_to\_replace, replace\_pattern)

STUFF (string, start, length, replacement\_expression)