Table

The data in RDBMS is stored in database objects are called Tables. Table is collection of related data entries and consists of rows and columns.

Table is most common and simplest form of data storage in a RDBMS.

Creating Table & enforce primary key, Unique key, Foreign key constraints, check constraint, default constraint:

Create table <TableName>

(

[ColumnName1] <columnDataType><lengthOfCharacters> [<nullability constraint>],

[ColumnName2] <columnDataType><lengthOfCharacters> [<nullability constraint>]

Constraint <df\_ConstraintName> default (<defaultValue>),

Constraint <PK\_ConstraintName> **Primary Key** ([colName1][,colName2],…),

Constraint <UQ\_ConstraintName> **Unique** ([colName1][,colName2],…),

Constraint <FK\_ConstraintName> **Foreign Key** (FK\_ColumnName1)

References <TableNameWhichIsToRefer>(PrimaryKeyColumnName),

Constraint <ck\_constriantName> **Check** (<ConditionReturnsTrueOrFalse>),

~~Constraint <df\_constriantName>~~ **~~Default~~** ~~(DefaultValue) for <columnName>~~

)

Nullability Constraint:

Two nullability constraint:

1. null
2. not null

Key Points

1. If column name contains spaces then enclose column name inside [ ],

otherwise, no need to enclosed in [ ].

1. If we don’t specify nullability constraint then it will be ‘null’ by default.
2. The foreign key should refer to the primary key column of another table.
3. We can define default constraint inline only.

If we define default constraint like strikethrough statement then Error.

Example:

Bank (Account Number, Bank Name, IFSC)

Employee (Employee Id, Employee Name, Father Name, Aadhar, BankAccount)

Rename Table

1. sp\_rename ‘OldTableName’, ‘NewTableName’
2. Select Table > Right click > Rename

Alter Table

Adding column to Table

1. Alter table <tableName>

# Adding Column to existing table

Add <columnName1> datatype <nullability>,

<columnName2> datatype <nullability>,

<columnName3> int identity(1,1) <nullability>,

<columnName4> datatype <nullability> default (‘’)

1. Select Table > Right Click > Design (From here we can change multiple columns together in one go).

**Note: No need to specify multiple ‘add’ multiple times while adding multiple columns.**

Changing Data type of the column

1. Alter table <tableName>

Alter column <columnName> newDataTpe nullability

1. Select Table> Right Click > Design (From here we can change multiple columns together in one go).

**Note:**

If warning message displays on altering table, then go to:

Tools > Options > Designers > Table & DB Designer

Disable > prevent saving changes that require recreation

Changing Only Column Name and Rest things should be same

1. Exec sp\_rename ‘TableName.OldColumnName’, ‘NewColumnName’,’COLUMN’
2. Select Table > Right Click > Design (From here we can change multiple columns together in one go).
3. Select Column > Right Click > Rename

