SQl\_day\_5\_notes:

Analytical Function:

1. This function is used in sql similar to Aggregate function.
2. Group by clause is not used in analytical functions.
3. Inner join is not needed in case of analytical function and it will improve the performance for large databases.
4. analytical\_function() over (partition by ‘column\_name’

Order by ‘column\_name’)

1.Row\_num() : It returns unique sequential number,,no duplication is allowed

2.Rank(): It returns sequential numbers with respect to other columns . It will skip the next number if there is the same rank for two rows.

3.Dense\_rank():It returns sequential numbers with respect to other columns . It will not skip the next number if there is the same rank for two rows.

4.sum()

5.Max()

6.Min()

7.lead()

8.Nth Value()

View:

1.It is a Virtual table on top of the db table. (it’s a database object)

2.’Order by’ clause can not be used in View.

3.View always fetches the latest data from the original table if any update happens there.

Uses of View:

a.For security purpose in Database View is used where the user can only see the specified columns in Read Only mode,

b.View can be used Repeatedly.

c.It will create Impact on database performance as we are not creating the table repeatedly.

E.g (Create view <view\_name>

As

(Query from the main table))

Then **select \* from <view\_name>** is used to fetch the view details.

Index:

1.For large dataset,to find out a particular record as per query is time consuming,if index is there on any column it will retrieve data faster.

2. Clustered Index (primary key) and non clustered index (user defined)

3.Example (**create index ix\_emp\_sal on employee(salary)**) [creating index on salary column of employee table]

4.To drop index : **Drop Index employee( ix\_emp\_sal)**

Sequence:

1.Sequence is used to create sequential numbers.

2.Example (Create sequence <sequence\_name>

Start with int,

Increment by int,

Maxvalue int (if needed),

Minvalue int,

Cache int (if needed),

Cycle (if needed))

3. **<sequence\_name>.nextval** is used to create the sequence inside a table

Data Integrity:

1.It means the data which is in the database is accurate,reliable and consistent.

2. There should be no data duplication and tables should be created with all necessary constraints.

1.Entity integrity : Primary key( where each row will be uniquely identified,it will obey both not null and unique constraint)

2.referential Integrity: Foreign key (it references another column from another table,,data type must be same,,the reference column should be primary key or unique key of that table,,there should be no other values in foreign key column than the primary/unique key column)

3.Domain Integrity: Not null,Check,Default