**create table TEMP**.employee(

id **int** ,

**name varchar**(50),

age **int**,

salary **int** ,

city **varchar**(50),

designation **varchar**(50)

)

**go**

**truncate table temp**.employee

**Go**

**insert into temp**.employee **values**(1,'zubair',26,50000,'islamabad','dataenginer');

**insert into temp**.employee **values**(2,'ali',23,50000,'wahcantt','dataenginer');

**insert into temp**.employee **values**(3,'fuzail',28,70000,'abbotabad','dataenginer');

**insert into temp**.employee **values**(4,'adnan',25,40000,'islamabad','dataenginer');

**insert into temp**.employee **values**(5,'ahmed',26,60000,'islamabad','dataenginer');

**go**

**select** \* **from temp**.employee

**go**

**update**  **temp**.employee

**set** designation = 'datascientist'

**where name** = 'fuzail'

**go**

**delete from temp**.employee

**where name** = 'zubair'

**go**

To check max legth of clumns of a table

SELECT

COLUMN\_NAME,

MAX\_LENGTH,

CASE

WHEN MAX\_LENGTH IS NULL THEN 50

WHEN MAX\_LENGTH <20 THEN 50

WHEN MAX\_LENGTH <50 THEN 100

WHEN MAX\_LENGTH BETWEEN 50 AND 100 THEN 200

WHEN MAX\_LENGTH >100 THEN (MAX\_LENGTH\*2.5)::INT

END V\_LEN,

COLUMN\_NAME||' VARCHAR('||V\_LEN||'),'

FROM (

| SELECT 'LEAD\_CO\_MNE' AS COLUMN\_NAME, MAX(LENGTH(LEAD\_CO\_MNE)) AS MAX\_LENGTH FROM STG.T24\_COLLATERAL\_LocalRef\_L\_TDC\_NO UNION ALL |
| --- |
| SELECT 'BRANCH\_CO\_MNE' AS COLUMN\_NAME, MAX(LENGTH(BRANCH\_CO\_MNE)) AS MAX\_LENGTH FROM STG.T24\_COLLATERAL\_LocalRef\_L\_TDC\_NO UNION ALL |
| SELECT 'MIS\_DATE' AS COLUMN\_NAME, MAX(LENGTH(MIS\_DATE)) AS MAX\_LENGTH FROM STG.T24\_COLLATERAL\_LocalRef\_L\_TDC\_NO UNION ALL |
| SELECT 'array\_sequence' AS COLUMN\_NAME, MAX(LENGTH(array\_sequence)) AS MAX\_LENGTH FROM STG.T24\_COLLATERAL\_LocalRef\_L\_TDC\_NO UNION ALL |
| SELECT '\_ID' AS COLUMN\_NAME, MAX(LENGTH(\_ID)) AS MAX\_LENGTH FROM STG.T24\_COLLATERAL\_LocalRef\_L\_TDC\_NO UNION ALL |
| SELECT 'L\_TDC\_AC\_HLR\_NM' AS COLUMN\_NAME, MAX(LENGTH(L\_TDC\_AC\_HLR\_NM)) AS MAX\_LENGTH FROM STG.T24\_COLLATERAL\_LocalRef\_L\_TDC\_NO UNION ALL |
| SELECT 'L\_TDC\_FACE\_VAL' AS COLUMN\_NAME, MAX(LENGTH(L\_TDC\_FACE\_VAL)) AS MAX\_LENGTH FROM STG.T24\_COLLATERAL\_LocalRef\_L\_TDC\_NO UNION ALL |
| SELECT 'L\_TDC\_ISSUE\_DT' AS COLUMN\_NAME, MAX(LENGTH(L\_TDC\_ISSUE\_DT)) AS MAX\_LENGTH FROM STG.T24\_COLLATERAL\_LocalRef\_L\_TDC\_NO UNION ALL |
| SELECT 'L\_TDC\_MAT\_DT' AS COLUMN\_NAME, MAX(LENGTH(L\_TDC\_MAT\_DT)) AS MAX\_LENGTH FROM STG.T24\_COLLATERAL\_LocalRef\_L\_TDC\_NO UNION ALL |
| SELECT 'L\_TDC\_NO' AS COLUMN\_NAME, MAX(LENGTH(L\_TDC\_NO)) AS MAX\_LENGTH FROM STG.T24\_COLLATERAL\_LocalRef\_L\_TDC\_NO |

)A

WINDOW FUNCTIONS

**select** f.\*,

**max**(CLOSING\_BAL) **over**() **AS** MAXSALARY

**from** sdm.FINANCE\_FACT f

**go** */// over(partition by cloumnname) clause*

**select** f.\*,

**max**(CLOSING\_BAL) **over**(**PARTITION by** DESCRIPTION) **AS** MAXCLOSING\_BAL

**from** sdm.FINANCE\_FACT f

**go** *// rown\_number() cluase*

**select** f.\*,

**row\_number**() **over**(**PARTITION by** DESCRIPTION **ORDER BY** CLOSING\_BAL) **AS** MAXCLOSING\_BAL

**from** sdm.FINANCE\_FACT f

**go** *// RANK() CLAUSE USED*

**select** f.\*,

**RANK**() **over**(**PARTITION by** DESCRIPTION **ORDER BY** CLOSING\_BAL) **AS** MAXCLOSING\_BAL

**from** sdm.FINANCE\_FACT f

**GO** *// DENE\_RANK() CLASUE USED*

**select** f.\*,

DENCE\_RANK() **over**(**PARTITION by** DESCRIPTION **ORDER BY** CLOSING\_BAL) **AS** MAXCLOSING\_BAL

**from** sdm.FINANCE\_FACT f

common table expression

WITH my\_cte AS (

SELECT a,b,c

FROM T1

)

SELECT a,c

FROM my\_cte

WHERE ....

1. HAVING: Filters the summary groups based on one or more conditions.

Syntax: SELECT column\_name1, aggregate\_function(column\_name2), ... FROM table\_name GROUP BY column\_name1 HAVING condition;

Example: SELECT department, AVG(salary) FROM employees GROUP BY department HAVING AVG(salary) > 60000;