18CSC303J/ DBMS

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Exp-6: Views

Aim:- To study the various SQL view operations on the database.

Commands:-

1. **CREATE VIEW** command is used to define a view.
2. **INSERT** command is used to insert a new row into the view.
3. **DELETE** command is used to delete a row from the view.
4. **UPDATE** command is used to change a value in a tuple without changing all values in the tuple.

   DROP command is used to drop the table

Procedure:-

```
Creation Of Table
---------------------
Sql> Create Table
Employee (
Employee_Namevarch
ar2(10),
Employee_Nonumber(
8), Dept_Name
Varchar2(10),
Dept_No Number
(5),Date_Of_Join Date); Table
Created.

Table Description
---------------------
Sql> Desc
Employee;
Name Null?
Type
------------------- ----- ----------------------------
Employee_Name
Varchar2(10)
Employee_No
Number(8)
Dept_Name
Varchar2(10)
Dept_No Number(5)
Date_Of_Join Date
```

Syntax For Creation Of View

Sql> Create <View> <View Name> As Select
<Column_Name_1>, <Column_Name_2> From <Table
Name>; Creation Of View

Sql> Create View Empview As Select
Employee_Name,Employee_No,Dept_Name,Dept_No,Date_Of_J
oin From Employee;
View Created.
Description Of View

Sql> Desc
Empview;
Name Null?
Type

Employee_Name
Varchar2(10)
Employee_No
Number(8)
Dept_Name
Varchar2(10)
Dept_No Number(5)

Display View:

Sql> Select * From Empview;
Employee_N Employee_No Dept_Name Dept_No

Ravi 124 Ece 89
Vijay 345 Cse 21
Raj 98 It 22
Giri 100

Cse 67

Insertion

Into View

Insert Statement:
Syntax:
Sql> Insert Into <View_Name> (Column
Name1,………) Values(Value1,….);
Sql> Insert Into Empview Values ('Sri', 120,'Cse', 67,'16-
Nov-1981'); 1 Row Created.
Sql> Select * From Empview;
Employee_N Employee_No Dept_Name Dept_No

Ravi 124 Ece 89
Vijay 345 Cse 21
Raj 98 It 22
Giri 100 Cse 67
Sri 120 Cse 67
Sql> Select * From Employee;

Employee_N Employee_No Dept_Name Dept_No Date_Of_J
Ravi 124 Ece 89 15-Jun-05
Vijay 345 Cse 21 21-Jun-06
Raj 98 It 22 30-Sep-06
Giri 100 Cse 67 14-Nov-81
Sri 120 Cse 67
16-Nov-81

**Deletion Of
View:**
Delete Statement:
Syntax:
Sql> Delete <View_Nmae>Where <Column Nmae>
='Value'; Sql> Delete From Empview Where
Employee_Name='Sri';
1 Row Deleted.
Sql> Select * From Empview;
Employee_N Employee_No Dept_Name Dept_No

Ravi 124 Ece 89
Vijay 345 Cse 21
Raj 98 It 22
Giri 100
Cse 67

**Update
Stateme
nt:**
Syntax:
Aql>Update <View_Name> Set< Column Name> = <Column Name>
+<View> Where <Columnname>=Value;
Sql> Update Empkaviview Set

Employee_Name='Kavi' Where
Employee_Name='Ravi';
1 Row Updated.
Sql> Select * From Empkaviview;
Employee_N Employee_No Dept_Name Dept_No

Kavi 124 Ece 89
Vijay 345 Cse 21
Raj 98 It 22
Giri
100
Cse 67
Drop
A
View:
Syntax:
Sql> Drop View
<View_Name>
Example
Sql>Drop View Empview;

View Dropped

Create A View With Selected Fields:
Syntax:
Sql>Create [Or Replace] View <View Name>As Select
<Column Name1>…..From <Table Anme>;
Example-2:
Sql> Create Or Replace View Empl_View1 As Select Empno,
Ename, Salary From Empl;

Sql> Select * From
Empl_View1; Example-
3:
Sql> Create Or Replace View Empl_View2 As Select * From
Empl Where Deptno=10;
Sql> Select * From
Empl_View2; Note:
☐   Replace Is The Keyboard To Avoid The Error "Ora_0095:Name Is Already Used
By An Existing
Abject".
Changing The Column(S) Name M The View During
As Select Statement:
Type-1:
Sql> Create Or Replace View Emp_Totsal(Eid,Name,Sal) As
Select Empno,Ename,Salary From Empl;
View Created.
Empno Ename Salary

7369 Smith 1000
7499 Mark 1050
7565 Will 1500
7678 John 1800
7578 Tom 1500
7548 Turner 1500
6 Rows
Selecte
d.
View
Created.
Empno Ename Salary Mgrno Deptno

7578 Tom 1500 7298 10
7548 Turner 1500 7298 10
View Created.
Sql> Select * From
Emp_Totsal; Type-2:
Sql> Create Or Replace View Emp_Totsal As Select Empno
"Eid",Ename "Name",Salary "Sal" From Empl;
Sql> Select * From
Emp_Totsal; Example
For Join View:
Type-3:
Sql> Create Or Replace View Dept_Emp As Select A.Empno
"Eid",A.Ename "Empname",A.Deptno "Dno",B.Dnam
E "D_Name",B.Loc "D_Loc" From Empl A,Depmt
B Where A.Deptno=B.Deptno;
Sql> Select * From
Dept_Emp; Eid Name
Sal

7369 Smith 1000
7499 Mark 1050
7565 Will 1500
7678 John 1800
7578 Tom 1500
7548 Turner 1500
6 Rows

RESULT:
       Thus the SQL views have been executed successfully.

Execution:-

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Enter user-name: **RA1911003010367/RA1911003010367@f1-drjebakumar.co86hfjmfjkx.us-west-2.rds.amazonaws.com:1521/F1**

Connected to:
Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 - Production

SQL> **spool exp6.lst**
SQL> **CREATE TABLE Employee(Employee_Name varchar2(20), Employee_No number(8), Dept_Name varchar2(20), Dept_No number(5), Date_Of_Join Date);**

Table created.

SQL> Desc
Usage: DESCRIBE [schema.]object[@db_link]
SQL> desc
Usage: DESCRIBE [schema.]object[@db_link]
SQL> **desc Employee;**

Name	Null?	Type
EMPLOYEE_NAME		VARCHAR2(20)
EMPLOYEE_NO		NUMBER(8)
DEPT_NAME		VARCHAR2(20)
DEPT_NO		NUMBER(5)
DATE_OF_JOIN		DATE

SQL> **insert into Employee values('Kim', 111, 'CSE', 1, '12-DEC-95');**

1 row created.

SQL> **insert into Employee values('Min', 222, 'MECHANICAL', 2, '9-MAR-93');**

1 row created.

SQL> **insert into Employee values('Jung', 333, 'ECE', 3, '18-FEB-94');**

1 row created.

SQL> **insert into Employee values('Park', 444, 'EEE', 4, '13-OCT-95');**

1 row created.

SQL> insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '1-SEPT-97');
insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '1-SEPT-97')
                                              *
ERROR at line 1:
ORA-01861: literal does not match format string

SQL> insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '4-SEPT-97');
insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '4-SEPT-97')
                                              *
ERROR at line 1:
ORA-01861: literal does not match format string

SQL> **insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '1-SEPTEMBER-97');**

1 row created.

SQL> **CREATE view Empviews as Select Employee_Name, Employee_No, Dept_Name, Dept_No from Employee;**

View created.

SQL> **SELECT * FROM Empviews;**

EMPLOYEE_NAME	EMPLOYEE_NO	DEPT_NAME	DEPT_NO
Kim	111	CSE	1
Min	222	MECHANICAL	2
Jung	333	ECE	3
Park	444	EEE	4
Jeon	555	AEROSPACE	5

SQL> SELECT * FROM Empployee;
SELECT * FROM Empployee
         *
ERROR at line 1:
ORA-00942: table or view does not exist

```
SQL> SELECT * FROM Employee;

EMPLOYEE_NAME          EMPLOYEE_NO  DEPT_NAME                  DEPT_NO  DATE_OF_J
----------------------  ------------------  -------------------------  ------------  --------------
Kim                            111  CSE                              1  12-DEC-95
Min                            222  MECHANICAL                       2  09-MAR-93
Jung                           333  ECE                              3  18-FEB-94
Park                           444  EEE                              4  13-OCT-95
Jeon                           555  AEROSPACE                        5  01-SEP-97

SQL> insert into Empviews values('Manoban', 666, 'SW', 6);

1 row created.

SQL> SELECT * FROM Empviews;

EMPLOYEE_NAME          EMPLOYEE_NO  DEPT_NAME                  DEPT_NO
----------------------  ------------------  -------------------------  ------------
Kim                            111  CSE                              1
Min                            222  MECHANICAL                       2
Jung                           333  ECE                              3
Park                           444  EEE                              4
Jeon                           555  AEROSPACE                        5
Manoban                        666  SW                               6

6 rows selected.

SQL> SELECT * FROM Empployee;
SELECT * FROM Empployee
       *
ERROR at line 1:
ORA-00942: table or view does not exist


SQL> SELECT * FROM Employee;

EMPLOYEE_NAME          EMPLOYEE_NO  DEPT_NAME                DEPT_NO  DATE_OF_J
----------------------  ------------------  -----------------------  -----------  --------------
Kim                            111  CSE                            1  12-DEC-95
Min                            222  MECHANICAL                     2  09-MAR-93
Jung                           333  ECE                            3  18-FEB-94
Park                           444  EEE                            4  13-OCT-95
Jeon                           555  AEROSPACE                      5  01-SEP-97
Manoban                        666  SW                             6

6 rows selected.

SQL> delete from Empviews where Employee_Name = 'Manobas';

0 rows deleted.
```

SQL> **delete from Empviews where Employee_Name = 'Manoban';**

1 row deleted.

SQL> **update Empviews set Employee_Name = 'Bieber' Where Employee_Name = 'Jung';**

1 row updated.

SQL> **SELECT * FROM Empviews;**

EMPLOYEE_NAME	EMPLOYEE_NO	DEPT_NAME	DEPT_NO
Kim	111	CSE	1
Min	222	MECHANICAL	2
Bieber	333	ECE	3
Park	444	EEE	4
Jeon	555	AEROSPACE	5

SQL> **SELECT * FROM Employee;**

EMPLOYEE_NAME	EMPLOYEE_NO	DEPT_NAME	DEPT_NO	DATE_OF_J
Kim	111	CSE	1	12-DEC-95
Min	222	MECHANICAL	2	09-MAR-93
Bieber	333	ECE	3	18-FEB-94
Park	444	EEE	4	13-OCT-95
Jeon	555	AEROSPACE	5	01-SEP-97

SQL> DROP views Empviews;
DROP views Empviews
     *
ERROR at line 1:
ORA-00950: invalid DROP option

SQL> **DROP view Empviews;**

View dropped.

SQL> **CREATE view Eviews as Select Employee_Name, Employee_No, Dept_Name, Dept_No from Employee;**

View created.

SQL> **SELECT * FROM Eviews;**

EMPLOYEE_NAME	EMPLOYEE_NO	DEPT_NAME	DEPT_NO
Kim	111	CSE	1
Min	222	MECHANICAL	2
Bieber	333	ECE	3
Park	444	EEE	4
Jeon	555	AEROSPACE	5

SQL>

```
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Enter user-name: RA1911003010367/RA1911003010367@f1-drjebakumar.co86hfjmfjkx.us-west-2.rds.amazonaws.com:1521/F1

Connected to:
Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 - Production

SQL> spool exp6.lst
```

```
SQL> CREATE TABLE Employee(Employee_Name varchar2(20), Employee_No number(8), Dept_Name varchar2(20), Dept_No number(5), Date_Of_Join Date);

Table created.

SQL> Desc
Usage: DESCRIBE [schema.]object[@db_link]
SQL> desc
Usage: DESCRIBE [schema.]object[@db_link]
SQL> desc Employee;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 EMPLOYEE_NAME                                      VARCHAR2(20)
 EMPLOYEE_NO                                        NUMBER(8)
 DEPT_NAME                                          VARCHAR2(20)
 DEPT_NO                                            NUMBER(5)
 DATE_OF_JOIN                                       DATE

SQL> insert into Employee values('Kim', 111, 'CSE', 1, '12-DEC-95');

1 row created.

SQL> insert into Employee values('Min', 222, 'MECHANICAL', 2, '9-MAR-93');

1 row created.

SQL> insert into Employee values('Jung', 333, 'ECE', 3, '18-FEB-94');

1 row created.

SQL> insert into Employee values('Park', 444, 'EEE', 4, '13-OCT-95');

1 row created.

SQL> insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '1-SEPT-97');
insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '1-SEPT-97')
                                                           *
ERROR at line 1:
ORA-01861: literal does not match format string
```

```
insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '4-SEPT-97')
                                                                   *
ERROR at line 1:
ORA-01861: literal does not match format string


SQL> insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '1-SEPTEMBER-97');

1 row created.

SQL> CREATE view Empviews as Select Employee_Name, Employee_No, Dept_Name, Dept_No from Employee;

View created.

SQL> SELECT * FROM Empviews;

EMPLOYEE_NAME        EMPLOYEE_NO DEPT_NAME              DEPT_NO
-------------------- ----------- -------------------- ----------
Kim                          111 CSE                        1
Min                          222 MECHANICAL                 2
Jung                         333 ECE                        3
Park                         444 EEE                        4
Jeon                         555 AEROSPACE                  5

SQL> SELECT * FROM Empployee;
SELECT * FROM Empployee
              *
ERROR at line 1:
ORA-00942: table or view does not exist


SQL> SELECT * FROM Employee;

EMPLOYEE_NAME        EMPLOYEE_NO DEPT_NAME              DEPT_NO DATE_OF_J
-------------------- ----------- -------------------- ---------- ---------
Kim                          111 CSE                        1 12-DEC-95
Min                          222 MECHANICAL                 2 09-MAR-93
Jung                         333 ECE                        3 18-FEB-94
Park                         444 EEE                        4 13-OCT-95
Jeon                         555 AEROSPACE                  5 01-SEP-97
```

```
SQL> insert into Empviews values('Manoban', 666, 'SW', 6);

1 row created.

SQL> SELECT * FROM Empviews;

EMPLOYEE_NAME        EMPLOYEE_NO DEPT_NAME              DEPT_NO
-------------------- ----------- -------------------- ----------
Kim                          111 CSE                        1
Min                          222 MECHANICAL                 2
Jung                         333 ECE                        3
Park                         444 EEE                        4
Jeon                         555 AEROSPACE                  5
Manoban                      666 SW                         6

6 rows selected.

SQL> SELECT * FROM Empployee;
SELECT * FROM Empployee
              *
ERROR at line 1:
ORA-00942: table or view does not exist


SQL> SELECT * FROM Employee;

EMPLOYEE_NAME        EMPLOYEE_NO DEPT_NAME              DEPT_NO DATE_OF_J
-------------------- ----------- -------------------- ---------- ---------
Kim                          111 CSE                        1 12-DEC-95
Min                          222 MECHANICAL                 2 09-MAR-93
Jung                         333 ECE                        3 18-FEB-94
Park                         444 EEE                        4 13-OCT-95
Jeon                         555 AEROSPACE                  5 01-SEP-97
Manoban                      666 SW                         6

6 rows selected.

SQL> delete from Empviews where Employee_Name = 'Manobas';

0 rows deleted.
```

```
SQL> delete from Empviews where Employee_Name = 'Manoban';

1 row deleted.

SQL> update Empviews set Employee_Name = 'Bieber' Where Employee_Name = 'Jung';

1 row updated.

SQL> SELECT * FROM Empviews;

EMPLOYEE_NAME        EMPLOYEE_NO DEPT_NAME              DEPT_NO
-------------------- ----------- -------------------- ----------
Kim                          111 CSE                        1
Min                          222 MECHANICAL                 2
Bieber                       333 ECE                        3
Park                         444 EEE                        4
Jeon                         555 AEROSPACE                  5

SQL> SELECT * FROM Employee;

EMPLOYEE_NAME        EMPLOYEE_NO DEPT_NAME              DEPT_NO DATE_OF_J
-------------------- ----------- -------------------- ---------- ---------
Kim                          111 CSE                        1 12-DEC-95
Min                          222 MECHANICAL                 2 09-MAR-93
Bieber                       333 ECE                        3 18-FEB-94
Park                         444 EEE                        4 13-OCT-95
Jeon                         555 AEROSPACE                  5 01-SEP-97

SQL> DROP views Empviews;
DROP views Empviews
     *
ERROR at line 1:
ORA-00950: invalid DROP option


SQL> DROP view Empviews;

View dropped.
```

```
SQL> CREATE view Eviews as Select Employee_Name, Employee_No, Dept_Name, Dept_No from Employee;

View created.

SQL> SELECT * FROM Eviews;

EMPLOYEE_NAME        EMPLOYEE_NO DEPT_NAME              DEPT_NO
-------------------- ----------- -------------------- ----------
Kim                          111 CSE                        1
Min                          222 MECHANICAL                 2
Bieber                       333 ECE                        3
Park                         444 EEE                        4
Jeon                         555 AEROSPACE                  5

SQL>
```

```
SQL> CREATE TABLE Employee(Employee_Name varchar2(20), Employee_No number(8),
Dept_Name varchar2(20), Dept_No number(5), Date_Of_Join Date);

Table created.

SQL> Desc
Usage: DESCRIBE [schema.]object[@db_link]
SQL> desc
Usage: DESCRIBE [schema.]object[@db_link]
SQL> desc Employee;
 Name                                      Null?    Type
 ----------------------------------------- -------- ---------------------------
 EMPLOYEE_NAME                                      VARCHAR2(20)
 EMPLOYEE_NO                                        NUMBER(8)
 DEPT_NAME                                          VARCHAR2(20)
 DEPT_NO                                            NUMBER(5)
 DATE_OF_JOIN                                       DATE

SQL> insert into Employee values('Kim', 111, 'CSE', 1, '12-DEC-95');

1 row created.

SQL> insert into Employee values('Min', 222, 'MECHANICAL', 2, '9-MAR-93');

1 row created.

SQL> insert into Employee values('Jung', 333, 'ECE', 3, '18-FEB-94');

1 row created.

SQL> insert into Employee values('Park', 444, 'EEE', 4, '13-OCT-95');

1 row created.

SQL> insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '1-SEPT-97');
insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '1-SEPT-97')
                                                              *
```

```
SQL> insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '1-SEPT-97');
insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '1-SEPT-97')
                                                              *

ERROR at line 1:
ORA-01861: literal does not match format string


SQL> insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '4-SEPT-97');
insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '4-SEPT-97')
                                                              *

ERROR at line 1:
ORA-01861: literal does not match format string


SQL> insert into Employee values('Jeon', 555, 'AEROSPACE', 5, '1-SEPTEMBER-97');

1 row created.

SQL> CREATE view Empviews as Select Employee_Name, Employee_No, Dept_Name,
Dept_No from Employee;

View created.

SQL> SELECT * FROM Empviews;

EMPLOYEE_NAME        EMPLOYEE_NO DEPT_NAME               DEPT_NO
-------------------- ----------- -------------------- ----------
Kim                          111 CSE                         1
Min                          222 MECHANICAL                  2
Jung                         333 ECE                         3
Park                         444 EEE                         4
Jeon                         555 AEROSPACE                   5

SQL> SELECT * FROM Empployee;
SELECT * FROM Empployee
              *
ERROR at line 1:
ORA-00942: table or view does not exist
```

```
exp6.lst - Notepad

File    Edit    View

SQL> SELECT * FROM Employee;

EMPLOYEE_NAME        EMPLOYEE_NO DEPT_NAME               DEPT_NO DATE_OF_J
-------------------- ----------- -------------------- ---------- ---------
Kim                          111 CSE                           1 12-DEC-95
Min                          222 MECHANICAL                    2 09-MAR-93
Jung                         333 ECE                           3 18-FEB-94
Park                         444 EEE                           4 13-OCT-95
Jeon                         555 AEROSPACE                     5 01-SEP-97

SQL> insert into Empviews values('Manoban', 666, 'SW', 6);

1 row created.

SQL> SELECT * FROM Empviews;

EMPLOYEE_NAME        EMPLOYEE_NO DEPT_NAME               DEPT_NO
-------------------- ----------- -------------------- ----------
Kim                          111 CSE                           1
Min                          222 MECHANICAL                    2
Jung                         333 ECE                           3
Park                         444 EEE                           4
Jeon                         555 AEROSPACE                     5
Manoban                      666 SW                            6

6 rows selected.

SQL> SELECT * FROM Empployee;
SELECT * FROM Empployee
              *
ERROR at line 1:
ORA-00942: table or view does not exist
```

```
exp6.lst - Notepad

File    Edit    View

SQL> SELECT * FROM Employee;

EMPLOYEE_NAME        EMPLOYEE_NO DEPT_NAME               DEPT_NO DATE_OF_J
-------------------- ----------- -------------------- ---------- ---------
Kim                          111 CSE                           1 12-DEC-95
Min                          222 MECHANICAL                    2 09-MAR-93
Jung                         333 ECE                           3 18-FEB-94
Park                         444 EEE                           4 13-OCT-95
Jeon                         555 AEROSPACE                     5 01-SEP-97
Manoban                      666 SW                            6

6 rows selected.

SQL> delete from Empviews where Employee_Name = 'Manobas';

0 rows deleted.

SQL> delete from Empviews where Employee_Name = 'Manoban';

1 row deleted.

SQL> update Empviews set Employee_Name = 'Bieber' Where Employee_Name = 'Jung';

1 row updated.

SQL> SELECT * FROM Empviews;

EMPLOYEE_NAME        EMPLOYEE_NO DEPT_NAME               DEPT_NO
-------------------- ----------- -------------------- ----------
Kim                          111 CSE                           1
Min                          222 MECHANICAL                    2
Bieber                       333 ECE                           3
Park                         444 EEE                           4
Jeon                         555 AEROSPACE                     5
```

```
exp6.lst - Notepad                                              —    □    ×

File    Edit    View                                                    ⚙

SQL> SELECT * FROM Employee;

EMPLOYEE_NAME           EMPLOYEE_NO DEPT_NAME            DEPT_NO DATE_OF_J
--------------------    ----------- -------------------- ---------- ---------
Kim                             111 CSE                        1 12-DEC-95
Min                             222 MECHANICAL                 2 09-MAR-93
Bieber                          333 ECE                        3 18-FEB-94
Park                            444 EEE                        4 13-OCT-95
Jeon                            555 AEROSPACE                  5 01-SEP-97

SQL> DROP views Empviews;
DROP views Empviews
     *
ERROR at line 1:
ORA-00950: invalid DROP option


SQL> DROP view Empviews;

View dropped.

SQL> CREATE view Eviews as Select Employee_Name, Employee_No, Dept_Name, Dept_No
from Employee;

View created.

SQL> SELECT * FROM Eviews;

EMPLOYEE_NAME           EMPLOYEE_NO DEPT_NAME            DEPT_NO
--------------------    ----------- -------------------- ----------
Kim                             111 CSE                        1
Min                             222 MECHANICAL                 2
Bieber                          333 ECE                        3
Park                            444 EEE                        4
Jeon                            555 AEROSPACE                  5

SQL> spool off
```

RESULT:

Thus the SQL views have been executed successfully.