Experiment 4

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Subject: ADBMS Lab **Subject Code: CSP-396**

1. **Aim/Overview of the practical:** To implement sequences, synonyms and views
2. **Task to be done: -**

Using Views in Queries:

- Creating Views
- Join Views
- Updating a Join View
- Dropping Views

Creating Sequences:

- Altering Sequences
- Generating Sequence Numbers with NEXTVAL
- Dropping Sequences

Creating Synonyms:

- Using Synonyms in DML Statements
- Dropping Synonyms

Steps for experiment/practical:

Creating Sequences

i. To create a sequence in your schema, you must have the CREATE SEQUENCE system privilege.
ii. Create a sequence using the CREATE SEQUENCE statement. For example:

```
create sequence stuid start with 2002 increment by 1 nocache nocycle;
```

iii. To generate and use a sequence number we use seq_name.nextval.

Example:

```
insert into Eligibe0 values(Stuid.nextval,'Shikha',3)
```

Creating Synonyms

iv. Create a synonym using the CREATE SYNONYM statement. For example:

```
create synonym syn0 for Eligibe0;
```

v. Using Synonyms in DML Statements, a synonym can be referenced in a DML statement the same way that the underlying object of the synonym can be referenced.

Example:

```
insert into syn0 values(Stuid.nextval,'prabha',2);
```

3. **Commands used:**

```
create table Eligible0 (ROLLNO int,NAME varchar(50),MARKS int); insert
INTO Eligible0values(2000,'Bhagath',0);
 insert INTO Eligible0values(2001,'John',3);
create sequence stuid start with 2002 increment by 1 nocache nocycle; insert
into Eligible0 values(Stuid.nextval,'Shikha',3);
 insert into Eligible0 values(Stuid.nextval,'vignita',2);

select * from Eligible0;
create synonym syn0 for Eligible0;
insert into syn0 values (Stuid.nextval,'prabha',2);
select * from syn0;
create view v1 as select Stu_Name,Backlog from Eligible0;
select * from v1;
create or replace view v1 as select Stu_Name,Backlog from Eligible0 where Backlog >1;
select * from v1;Stu_Name
update vw1 set Backlog =0 Stu_Name where Stu_Name =’Shikha';
select * from v1;
select * from Eligible0;
create view v2 as select Stu_Name from v1 where Backlog >1 ;
select * from v2;
```

4. **Result/Output/Writing Summary:**

```
SQL> create table Eligible0(stu_UID int,Stu_Name varchar(50),Backlog int);

Table created.

SQL> insert into Eligible0 values(2000,'Bhagath',0);

1 row created.

SQL> insert into Eligible0 values(2001,'John',3);

1 row created.
```

```
SQL> create sequence stuid start with 2002 increment by 1 nocache nocycle;

Sequence created.

SQL> insert into Eligible0 values(Stuid.nextval,'Shikha',3);

1 row created.

SQL> insert into Eligible0 values(Stuid.nextval,'vignita',2);

1 row created.

SQL> select *from Eligible0;

   STU_UID STU_NAME                                           BACKLOG
---------- -------------------------------------------------- ----------
      2000 Bhagath                                                 0
      2001 John                                                    3
      2002 Shikha                                                  3
      2003 vignita                                                 2

SQL> create synonym syn0 for Eligible0;

Synonym created.

SQL> insert into syn0 values(Stuid.nextval,'prabha',2);

1 row created.

SQL> select *from syn0;

   STU_UID STU_NAME                                           BACKLOG
---------- -------------------------------------------------- ----------
      2000 Bhagath                                                 0
      2001 John                                                    3
      2002 Shikha                                                  3
      2003 vignita                                                 2
      2004 prabha                                                  2
```

```
SQL> create view v1 as select Stu_Name,Backlog from Eligible0;

View created.

SQL> select *from v1;

STU_NAME                                           BACKLOG
-------------------------------------------------- ----------
Bhagath                                                 0
John                                                    3
Shikha                                                  3
vignita                                                 2
prabha                                                  2
```

```
SQL> create or replace view v1 as select Stu_Name,Backlog from Eligible0 where Backlog>1;

View created.

SQL> select *from v1;

STU_NAME                                         BACKLOG
------------------------------------------------ ----------
John                                                    3
Shikha                                                  3
vignita                                                 2
prabha                                                  2
```

```
SQL> update v1 set backlog=0 where Stu_Name='Shikha';

1 row updated.

SQL> select *from v1;

STU_NAME                                           BACKLOG
-------------------------------------------------- ----------
John                                                        3
vignita                                                     2
prabha                                                      2

SQL> update v1 set backlog=1 where Stu_Name='Shikha';

0 rows updated.

SQL> update v1 set backlog=2 where Stu_Name='John';

1 row updated.

SQL> select *from v1;

STU_NAME                                           BACKLOG
-------------------------------------------------- ----------
John                                                        2
vignita                                                     2
prabha                                                      2

SQL> create view v2 as select Stu_Name from Eligible0 where Backlog>1;

View created.

SQL> select *from v1;

STU_NAME                                           BACKLOG
-------------------------------------------------- ----------
John                                                        2
vignita                                                     2
prabha                                                      2

SQL> select *from v2;

STU_NAME
--------------------------------------------------
John
vignita
prabha
```

Learning outcomes (What I have learnt):

1. Learnt about the sequences, synonyms and views in SQL.
2. implement the sequences, synonyms and views command.
3. Learnt about SQL and Advance DBMS.