

# 15IT302J-DATABASE MANAGEMENT SYSTEMS

DATE:-13/8/19

EXPERIMENT-5

NAME:- NANDISH SHAH

REG NO:-RA1711008010143

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## 5 DATA MANIPULATION AND CONTROL

### ` Grant Command – Privilege like SELECT, INSERT, UPDATE, DELETE, ALTER

#### ❖ GRANT ALL PERMISSION ON CUSTOMER TABLE TO EVERYONE.

SQL> create view custview as select \* from customer;

View created.

SQL> grant all on custview to public;

Grant succeeded.

#### ❖ GRANT PERMISSION TO INSERT ONLY PARTICULAR COLUMNS IN CUSTVIEW;

SQL> grant insert (customer\_name) on custview to rdbms;

Grant succeeded.

#### ❖ GRANT SELECT PERMISSION TO CUSTOMER\_NAME TABLE TO USER RDBMS AND ALLOW HIM TO GIVE FURTHER GRANTS

SQL> create view custnameview as select \* from customer;

View created.

SQL> grant select on custnameview to rdbms with grant option;

Grant succeeded.

**REVOKE** – revoke database privileges from user.

SQL> revoke all on custview from public;

Revoke succeeded.

SQL> revoke select on custnameview from rdbms;

Revoke succeeded.

#### **APPLICATION PRIVILEGES MANAGEMENT – used to create ROLE – collection of related system privileges.**

SQL> create role rkarthik;

Role created.

SQL> grant select, update on custview to rkarthik;

Grant succeeded.

SQL> grant rkarthik to rdbms, scott;

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Grant succeeded.

### ENABLE ROLE

SQL> set role rkarthik;

Role set.

### DROP ROLE

SQL> drop role rkarthik;

Role dropped.

**INDEXES** –common way to enhance performance in retrieving information from table.

SQL> create table branchv as select \* from branch;

Table created.

SQL> create index brindx on branchv(branch\_name);

Index created.

SQL> create unique index brrindx on branchv (branch\_name,branch\_city);

Index created.

### DROPPING INDEX

SQL> drop index brindx;

Index dropped.

SQL> drop index brrindx;

Index dropped.

**SEQUENCES** – used to generate unique integers for use as primary key;

SQL> create sequence loanno increment by 1 start with 1000;

Sequence created.

### GENERATING SEQUENCE NUMBER WITH NEXTVAL

SQL> select loanno.nextval from dual;

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NEXTVAL

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1000

SQL> create view loanv as select \* from loan;

View created.

### GENERATING SEQUENCE NUMBERS WITH NEXTVAL

SQL> insert into loanv (loan\_no, branch\_name, amount) values (loanno.nextval, 'sbi', 5000);

1 row created.

SQL> select loanno.currval from dual;

CURRVAL

-----

1001

### USING SEQUENCE NUMBERS WITH CURRVAL

SQL> select loanno.currval from dual;

CURRVAL

-----

1001

### ALTERING A SEQUENCE:

SQL> alter sequence loanno increment by 2;

Sequence altered.

### REMOVING SEQUENCE:

SQL> drop sequence loanno;

Sequence dropped.

### VIEWING SEQUENCE CREATED:

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SQL> select \* from user\_sequences;

no rows selected

**COMMIT AND ROLLBACK** - commit used to make changes to data permanent, rollback used to discard parts or all the work the user has done in the current transaction.

SQL> set autocommit on;

SQL> set autocommit off;

SQL> commit;

Commit complete.

SQL> rollback;

Rollback complete.

**SAVEPOINTS:** - identifies a point in a transaction to which one can later rollback.

SQL> insert into branch values ('kvb', 'usa', 1000);

1 row created.

SQL> savepoint a;

Savepoint created.

SQL> select \* from branch;

BRANCH_NAME	BRANCH_CITY	ASSETS
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```
-----  
icici      mardurai      40000  
sbi        trichy        80000  
hdfc       salem         40000  
hsbc       ahemdabad     40000  
pnb        mumbai        80000  
iob        chennai       79000  
kvb        usa           1000
```

7 rows selected.

SQL> update branch set assets = 10000 where branch\_name = 'kvb';

1 row updated.

SQL> select \* from branch;

```
BRANCH_NAME  BRANCH_CITY      ASSETS  
-----  
icici        mardurai         40000  
sbi          trichy           80000  
hdfc         salem            40000  
hsbc         ahemdabad        40000  
pnb          mumbai           80000  
iob          chennai          79000  
kvb          usa              10000
```

7 rows selected.

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SQL> rollback to savepoint a;

Rollback complete.

SQL> select \* from branch;

BRANCH_NAME	BRANCH_CITY	ASSETS
icici	mardurai	40000
sbi	trichy	80000
hdfc	salem	40000
hsbc	ahemdabad	40000
pnb	mumbai	80000
iob	chennai	79000
kvb	usa	1000

7 rows selected.

SQL> rollback to savepoint a;

Rollback complete.

SQL> select \* from branch;

BRANCH_NAME	BRANCH_CITY	ASSETS
icici	mardurai	40000

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sbi	trichy	80000
hdfc	salem	40000
hsbc	ahemdabad	40000
pnb	mumbai	80000
iob	chennai	79000
kvb	usa	1000

7 rows selected.

**TYPE OBJECT:** - handles multivalued attribute.

SQL> create type phno as object (land number(10),office number(10),mobile number(10));

2 /

Type created.

SQL> alter table customer add customer\_phone phno;

Table altered.

QL> update customer set customer\_phone = phno('9999999999','8888888888','7777777777')where customer\_name='kadam';

1 row updated.

SQL> select \* from customer where customer\_name='kadam';

CUSTOMER\_NAME      CUSTOMER\_STREET

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CUSTOMER\_CITY

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## 5 DATA MANIPULATION AND CONTROL

CUSTOMER\_PHONE(LAND, OFFICE, MOBILE)

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kadam            sgroad

marduarai

PHNO(9999999999, 8888888888, 7777777777)