**Ex. No:**

**Date:**

**DDL Commands**

**AIM:**

To write queries for DDL commands

**QUERIES:**

1. CREATE
2. ALTER(add, default, drop, modify, rename)
3. TRUNCATE
4. DROP

**CREATE:**

SQL> create table JobPost(mailid varchar2(20), jobtitle varchar2(20), location varchar2(20), salary varchar2(10), jobrequire varchar2(20));

Table created.

SQL> insert into JobPost values('&mailid', '&jobtitle', '&location', '&salary', 'jobrequire');

Enter value for mailid: naru@gmail.com

Enter value for jobtitle: software developer

Enter value for location: newyork

Enter value for salary: 500000

old 1: insert into JobPost values('&mailid', '&jobtitle', '&location', '&salary', 'jobrequire')

new 1: insert into JobPost values('naru@gmail.com', 'software developer', 'newyork', '500000', 'jobrequire')

1 row created.

SQL> /

Enter value for mailid: hina@gmail.com

Enter value for jobtitle: software developer

Enter value for location: newyork

Enter value for salary: 500000

old 1: insert into JobPost values('&mailid', '&jobtitle', '&location', '&salary', 'jobrequire')

new 1: insert into JobPost values('hina@gmail.com', 'software developer', 'newyork', '500000', 'jobrequire')

1 row created.

SQL> /

Enter value for mailid: madara

Enter value for jobtitle: web developer

Enter value for location: washington

Enter value for salary: 200000

old 1: insert into JobPost values('&mailid', '&jobtitle', '&location', '&salary', 'jobrequire')

new 1: insert into JobPost values('madara', 'web developer', 'washington', '200000', 'jobrequire'

1 row created.

SQL> /

Enter value for mailid: obito

Enter value for jobtitle: senior developer

Enter value for location: washington

Enter value for salary: 150000

old 1: insert into JobPost values('&mailid', '&jobtitle', '&location', '&salary', 'jobrequire')

new 1: insert into JobPost values('obito', 'senior developer', 'washington', '150000', 'jobrequire')

1 row created.

SQL> /

Enter value for mailid: kakashi

Enter value for jobtitle: app developer

Enter value for location: silicon valley

Enter value for salary: 500000

old 1: insert into JobPost values('&mailid', '&jobtitle', '&location', '&salary', 'jobrequire')

new 1: insert into JobPost values('kakashi', 'app developer', 'silicon valley', '500000', 'jobrequire')

1 row created.

SQL> select \*from JobPost;

MAILID JOBTITLE LOCATION SALARY

-------------------- -------------------- -------------------- ----------

JOBREQUIRE

--------------------

naru@gmail.com software developer newyork 500000

jobrequire

hina@gmail.com software developer newyork 500000

jobrequire

madara web developer washington 200000

jobrequire

MAILID JOBTITLE LOCATION SALARY

-------------------- -------------------- -------------------- ----------

JOBREQUIRE

--------------------

obito senior developer washington 150000

jobrequire

kakashi app developer silicon valley 500000

jobrequire

SQL> update JobPost set mailid='madara@gmail.com' where mailid='madara';

1 row updated.

SQL> alter table JobPost drop column jobrequire;

Table altered.

SQL> desc JobPost;

Name Null? Type

----------------------------------------- -------- ----------------------------

MAILID VARCHAR2(20)

JOBTITLE VARCHAR2(20)

LOCATION VARCHAR2(20)

SALARY VARCHAR2(10)

SQL> alter table JobPost add jobrequire varchar2(20) default 'MCA';

Table altered

SQL> select mailid, jobrequire from JobPost;

MAILID JOBREQUIRE

-------------------- --------------------

naru@gmail.com MCA

hina@gmail.com MCA

madara@gmail.com MCA

obito MCA

kakashi MCA

SQL> alter table JobPost rename column location to country;

Table altered.

SQL> desc JobPost;

Name Null? Type

----------------------------------------- -------- ----------------------------

MAILID VARCHAR2(20)

JOBTITLE VARCHAR2(20)

COUNTRY VARCHAR2(20)

SALARY VARCHAR2(10)

JOBREQUIRE VARCHAR2(20)

SQL> alter table JobPost modify mailid varchar2(25);

Table altered.

SQL> desc JobPost;

Name Null? Type

----------------------------------------- -------- ----------------------------

MAILID VARCHAR2(25)

JOBTITLE VARCHAR2(20)

COUNTRY VARCHAR2(20)

SALARY VARCHAR2(10)

JOBREQUIRE VARCHAR2(20)

SQL> truncate table JobPost;

Table truncated.

SQL> select \*from JobPost

no rows selected

SQL> drop table JobPost;

Table dropped.

SQL> spool off;

**RESULT:**

The queries for data definition language is sussfully executed.

**Ex. No:**

**Date:**

**DML Commands**

**AIM:**

To write queries for DML commands

**QUERIES:**

1. INSERTION – STATIC
2. INSERTION – DYNAMIC
3. SELECTION (and, where, between, not between)
4. UPDATION
5. DELETION

SQL> create table JobPortalProfile(name varchar(20), mailid varchar2(20), degree varchar2(10), yoe integer, phno varchar2(11), gender varchar2(5));

Table created.

SQL> insert into JobPortalProfile values('&name', '&mailid', '&degree', &yoe, '&phno', '&gender');

Enter value for name: naruto

Enter value for mailid: naru@gmail.com

Enter value for degree: MCA

Enter value for yoe: 5

Enter value for phno: 568956425

Enter value for gender: male

old 1: insert into JobPortalProfile values('&name', '&mailid', '&degree', &yoe, '&phno', '&gender')

new 1: insert into JobPortalProfile values('naruto', 'naru@gmail.com', 'MCA', 5, '568956425', 'male')

1 row created.

SQL> alter table JobPortalProfile modify gender varchar2(10);

Table altered.

SQL> insert into JobPortalProfile values('&name', '&mailid', '&degree', &yoe, '&phno', '&gender');

Enter value for name: hinata

Enter value for mailid: hina@gmail.com

Enter value for degree: MCA

Enter value for yoe: 5

Enter value for phno: 8956245785

Enter value for gender: female

old 1: insert into JobPortalProfile values('&name', '&mailid', '&degree', &yoe, '&phno', '&gender')

new 1: insert into JobPortalProfile values('hinata', 'hina@gmail.com', 'MCA', 5, '8956245785', 'female')

1 row created.

SQL> /

Enter value for name: madara

Enter value for mailid: mad@gmail.com

Enter value for degree: ME

Enter value for yoe: 4

Enter value for phno: 7856986535

Enter value for gender: male

old 1: insert into JobPortalProfile values('&name', '&mailid', '&degree', &yoe, '&phno', '&gender')

new 1: insert into JobPortalProfile values('madara', 'mad@gmail.com', 'ME', 4, '7856986535', 'male')

1 row created.

SQL> /

Enter value for name: obito

Enter value for mailid: tobi@gmail.com

Enter value for degree: ME

Enter value for yoe: 3

Enter value for phno: 5689521564

Enter value for gender: male

old 1: insert into JobPortalProfile values('&name', '&mailid', '&degree', &yoe, '&phno', '&gender')

new 1: insert into JobPortalProfile values('obito', 'tobi@gmail.com', 'ME', 3, '5689521564', 'male')

1 row created.

SQL> /

Enter value for name: rin

Enter value for mailid: rin@gmail.com

Enter value for degree: MBA

Enter value for yoe: 5

Enter value for phno: 7845213568

Enter value for gender: female

old 1: insert into JobPortalProfile values('&name', '&mailid', '&degree', &yoe, '&phno', '&gender')

new 1: insert into JobPortalProfile values('rin', 'rin@gmail.com', 'MBA', 5, '7845213568', 'female')

1 row created.

SQL> /

Enter value for name: sakura

Enter value for mailid: saku@gmail.com

Enter value for degree: MCA

Enter value for yoe: 4

Enter value for phno: 7845692356

Enter value for gender: female

old 1: insert into JobPortalProfile values('&name', '&mailid', '&degree', &yoe, '&phno', '&gender')

new 1: insert into JobPortalProfile values('sakura', 'saku@gmail.com', 'MCA', 4, '7845692356', 'female')

1 row created.

SQL> /

Enter value for name: jiraya

Enter value for mailid: jiraya@gmail.com

Enter value for degree: MTech

Enter value for yoe: 11

Enter value for phno: 5689562356

Enter value for gender: male

old 1: insert into JobPortalProfile values('&name', '&mailid', '&degree', &yoe, '&phno', '&gender')

new 1: insert into JobPortalProfile values('jiraya', 'jiraya@gmail.com', 'MTech', 11, '5689562356', 'male')

1 row created.

SQL> /

Enter value for name: tsunade

Enter value for mailid: tsuna@gmail.com

Enter value for degree: MTech

Enter value for yoe: 11

Enter value for phno: 5623789545

Enter value for gender: female

old 1: insert into JobPortalProfile values('&name', '&mailid', '&degree', &yoe, '&phno', '&gender')

new 1: insert into JobPortalProfile values('tsunade', 'tsuna@gmail.com', 'MTech', 11, '5623789545', 'female')

1 row created.

SQL> /

Enter value for name: orochimaru

Enter value for mailid: oro@gmail.com

Enter value for degree: MTech

Enter value for yoe: 11

Enter value for phno: 8546235678

Enter value for gender: male

old 1: insert into JobPortalProfile values('&name', '&mailid', '&degree', &yoe, '&phno', '&gender')

new 1: insert into JobPortalProfile values('orochimaru', 'oro@gmail.com', 'MTech', 11, '8546235678', 'male')

1 row created.

SQL> select \*from JobPortalProfile;

NAME MAILID DEGREE YOE PHNO

-------------------- -------------------- ---------- ---------- -----------

GENDER

----------

naruto naru@gmail.com MCA 5 568956425

male

hinata hina@gmail.com MCA 5 8956245785

female

madara mad@gmail.com ME 4 7856986535

male

NAME MAILID DEGREE YOE PHNO

-------------------- -------------------- ---------- ---------- -----------

GENDER

----------

obito tobi@gmail.com ME 3 5689521564

male

rin rin@gmail.com MBA 5 7845213568

female

sakura saku@gmail.com MCA 4 7845692356

female

NAME MAILID DEGREE YOE PHNO

-------------------- -------------------- ---------- ---------- -----------

GENDER

----------

jiraya jiraya@gmail.com MTech 11 5689562356

male

tsunade tsuna@gmail.com MTech 11 5623789545

female

orochimaru oro@gmail.com MTech 11 8546235678

male

9 rows selected.

SQL> update JobPortalProfile set yoe=6 where mailid='mad@gmail.com';

1 row updated.

SQL> select \*from JobPortalProfile where mailid='mad@gmail.com';

NAME MAILID DEGREE YOE PHNO

-------------------- -------------------- ---------- ---------- -----------

GENDER

----------

madara mad@gmail.com ME 6 7856986535

male

SQL> delete from JobPortalProfile where mailid='rin@gmail.com';

1 row deleted.

SQL> select \*from JobPortalProfile where name like '%a';

NAME MAILID DEGREE YOE PHNO

-------------------- -------------------- ---------- ---------- -----------

GENDER

----------

hinata hina@gmail.com MCA 5 8956245785

female

madara mad@gmail.com ME 6 7856986535

male

sakura saku@gmail.com MCA 4 7845692356

female

NAME MAILID DEGREE YOE PHNO

-------------------- -------------------- ---------- ---------- -----------

GENDER

----------

jiraya jiraya@gmail.com MTech 11 5689562356

male

SQL> select \*from JobPortalProfile where name like 'o%';

NAME MAILID DEGREE YOE PHNO

-------------------- -------------------- ---------- ---------- -----------

GENDER

----------

obito tobi@gmail.com ME 3 5689521564

male

orochimaru oro@gmail.com MTech 11 8546235678

male

SQL> select name from JobPortalProfile where yoe between 5 and 12;

NAME

--------------------

naruto

hinata

madara

jiraya

tsunade

orochimaru

6 rows selected.

SQL> select name, degree from JobPortalProfile where degree not in ('ME', 'MBA');

NAME DEGREE

-------------------- ----------

naruto MCA

hinata MCA

sakura MCA

jiraya MTech

tsunade MTech

orochimaru MTech

6 rows selected.

SQL> update JobPortalProfile set yoe=4 where name='obito';

1 row updated.

SQL> update JobPortalProfile set yoe=13 where name='jiraya'

1 row updated.

SQL> delete from JobPortalProfile where name='sakura';

1 row deleted.

SQL> delete from JobPortalProfile where name='orochimaru';

1 row deleted.

SQL> select \*from JobPortalProfile;

NAME MAILID DEGREE YOE PHNO

-------------------- -------------------- ---------- ---------- -----------

GENDER

----------

naruto naru@gmail.com MCA 5 568956425

male

hinata hina@gmail.com MCA 5 8956245785

female

madara mad@gmail.com ME 6 7856986535

male

NAME MAILID DEGREE YOE PHNO

-------------------- -------------------- ---------- ---------- -----------

GENDER

----------

obito tobi@gmail.com ME 4 5689521564

male

jiraya jiraya@gmail.com MTech 13 5689562356

male

tsunade tsuna@gmail.com MTech 11 5623789545

female

6 rows selected.

**RESULT:**

The queries for data manipulation language is successsfully executed.

**Ex. No:**

**Date:**

**INTEGRITY CONSTRAINTS**

**AIM:**

To execute the DDL with constraints in SQL.

**QUERIES:**

1. PRIMARY KEY
2. FOREIGN KEY
3. UNIQUE KEY
4. NULL
5. NOT NULL
6. CHECK CONSTRAINT

SQL> create table JobPortalDegrees(dno integer primary key, degreename varchar2(10));

Table created.

SQL> insert into JobPortalDegrees values(&dno, '&degreename');

Enter value for dno: 101

Enter value for degreename: MCA

old 1: insert into JobPortalDegrees values(&dno, '&degreename')

new 1: insert into JobPortalDegrees values(101, 'MCA')

1 row created.

SQL> /

Enter value for dno: 102

Enter value for degreename: MBA

old 1: insert into JobPortalDegrees values(&dno, '&degreename')

new 1: insert into JobPortalDegrees values(102, 'MBA')

1 row created.

SQL> /

Enter value for dno: 103

Enter value for degreename: ME

old 1: insert into JobPortalDegrees values(&dno, '&degreename')

new 1: insert into JobPortalDegrees values(103, 'ME')

1 row created.

SQL> /

Enter value for dno: 104

Enter value for degreename: MTech

old 1: insert into JobPortalDegrees values(&dno, '&degreename')

new 1: insert into JobPortalDegrees values(104, 'MTech')

1 row created.

SQL> /

Enter value for dno: 105

Enter value for degreename: BTech

old 1: insert into JobPortalDegrees values(&dno, '&degreename')

new 1: insert into JobPortalDegrees values(105, 'BTech')

1 row created.

SQL> /

Enter value for dno: 106

Enter value for degreename: BE

old 1: insert into JobPortalDegrees values(&dno, '&degreename')

new 1: insert into JobPortalDegrees values(106, 'BE')

1 row created.

SQL> select \*from JobPortalDegrees;

DNO DEGREENAME

---------- ----------

101 MCA

102 MBA

103 ME

104 MTech

105 BTech

106 BE

6 rows selected.

SQL> create table JobSeekers(mailid varchar2(20) not null primary key, name varchar2(20), degree varchar2(20), dno integer);

Table created.

SQL> alter table JobSeekers add constraints fk\_dno foreign key(dno) references JobPortalDegrees(dno);

Table altered.

SQL> alter table JobSeekers add gender varchar(10);

Table altered.

SQL> alter table JobSeekers drop column gender;

Table altered.

SQL> alter table JobSeekers add age integer;

Table altered.

SQL> alter table JobSeekers add constraint gender\_check check (age>=18 and age<=60);

Table altered.

SQL> alter table JobSeekers add constraint unik unique(name, degree);

Table altered.

SQL> desc JobSeekers;

Name Null? Type

----------------------------------------- -------- ----------------------------

MAILID NOT NULL VARCHAR2(20)

NAME VARCHAR2(20)

DEGREE VARCHAR2(20)

DNO NUMBER(38)

AGE NUMBER(38)

SQL> insert into JobSeekers values('&mailid', '&name', '&degree', &dno, &age);

Enter value for mailid: naru@gmail.com

Enter value for name: naruto

Enter value for degree: MCA

Enter value for dno: 101

Enter value for age: 24

old 1: insert into JobSeekers values('&mailid', '&name', '&degree', &dno, &age)

new 1: insert into JobSeekers values('naru@gmail.com', 'naruto', 'MCA', 101, 24)

1 row created.

SQL> /

Enter value for mailid: hina@gmail.com

Enter value for name: hinata

Enter value for degree: MCA

Enter value for dno: 101

Enter value for age: 20

old 1: insert into JobSeekers values('&mailid', '&name', '&degree', &dno, &age)

new 1: insert into JobSeekers values('hina@gmail.com', 'hinata', 'MCA', 101, 20)

1 row created.

SQL> /

Enter value for mailid: sakura

Enter value for name: sakura

Enter value for degree: ME

Enter value for dno: 103

Enter value for age: 22

old 1: insert into JobSeekers values('&mailid', '&name', '&degree', &dno, &age)

new 1: insert into JobSeekers values('sakura', 'sakura', 'ME', 103, 22)

1 row created.

SQL> /

Enter value for mailid: sasu@gmail.com

Enter value for name: sasuke

Enter value for degree: ME

Enter value for dno: 103

Enter value for age: 34

old 1: insert into JobSeekers values('&mailid', '&name', '&degree', &dno, &age)

new 1: insert into JobSeekers values('sasu@gmail.com', 'sasuke', 'ME', 103, 34)

1 row created.

SQL> select \*from JobSeekers;

MAILID NAME DEGREE DNO

-------------------- -------------------- -------------------- ----------

AGE

----------

naru@gmail.com naruto MCA 101

24

hina@gmail.com hinata MCA 101

20

sakura sakura ME 103

22

MAILID NAME DEGREE DNO

-------------------- -------------------- -------------------- ----------

AGE

----------

sasu@gmail.com sasuke ME 103

34

SQL> select name, mailid from JobSeekers where dno in (select dno from JobPortalDegrees where degree='MCA');

NAME MAILID

-------------------- --------------------

naruto naru@gmail.com

hinata hina@gmail.com

SQL> select name, mailid from JobSeekers where degree in(select degree from JobPortalDegrees where dno=103);

NAME MAILID

-------------------- --------------------

naruto naru@gmail.com

hinata hina@gmail.com

sakura sakura

sasuke sasu@gmail.com

**RESULT:**

Thus the integrity constraints query has been executed successfully.

**Ex. No:**

**Date:**

**DCL Commands**

**AIM:**

To write queries for DCL commands.

**QUERIES:**

1. CREATE USER
2. GRANT
3. REVOKE
4. LOCK AND UNLOCK
5. ROLE CREATION

**USER 1:**

SQL> connect system

Enter password:

Connected.

SQL> create user naruto identified by naru123;

User created.

SQL> grant create session to naruto;

Grant succeeded.

SQL> grant select on profile to naruto with grant option;

Grant succeeded.

SQL> commit;

Commit complete.

SQL> create role rolefor\_naruto;

Role created.

SQL> grant select, insert on JobPortalProfile to rolefor\_naruto;

Grant succeeded.

SQL> grant rolefor\_naruto to naruto;

Grant succeeded.

SQL> commit;

Commit complete.

SQL> alter user naruto account lock;

User altered.

SQL> commit;

Commit complete.

SQL> alter user naruto account unlock;

User altered.

SQL> commit;

Commit complete.

SQL> revoke select on profile from naruto;

Revoke succeeded.

SQL> commit;

Commit complete.

**USER 2:**

SQL> connect naruto

Connected.

SQL> select \*from profile;

select \*from profile

\*

ERROR at line 1:

ORA-00942: table or view does not exist

SQL> select \*from system.profile;

NAME MAILID DEGRE GENDER PH\_NO

-------------------- -------------------- ----- ------ ----------

naruto naru@gmail.com MCA male 5689562458

hashirama hashi@gmail.com MCA male 6532689555

hinata hina@gmail.com MCA female 895624578

sasuke sas@gmail.com MBA male 568923564

tsunade tsu@gmail.com ME female 4568956635

SQL> select \*from JobPortalProfile;

select \*from JobPortalProfile

\*

ERROR at line 1:

ORA-00942: table or view does not exist

SQL> disconnect;

Disconnected from Oracle Database 10g Express Edition Release 10.2.0.1.0 - Production

SQL> connect naruto

ERROR:

ORA-28000: the account is locked

SQL> connect naruto

Connected.

SQL> select \*from system.profile;

select \*from system.profile

\*

ERROR at line 1:

ORA-00942: table or view does not exist

**RESULT:**

Thus the data control lanfuafe queuries has veen executed successfully.

**Ex. No:**

**Date:**

**TCL Commands**

**AIM:**

To write queries for TCL commands.

**QUERIES:**

1. ROLL BACK
2. SAVEPOINT
3. COMMIT

SQL> desc profile;

Name Null? Type

----------------------------------------- -------- ----------------------------

NAME VARCHAR2(20)

MAILID NOT NULL VARCHAR2(20)

DEGREE VARCHAR2(5)

GENDER VARCHAR2(6)

PH\_NO VARCHAR2(10)

SQL> insert into profile values('&name', '&mailid', '&degree', '&gender', '&ph\_no');

Enter value for name: 110

Enter value for mailid: orochimaru

Enter value for degree: ME

Enter value for gender: female

Enter value for ph\_no: 5626589745

old 1: insert into profile values('&name', '&mailid', '&degree', '&gender', '&ph\_no')

new 1: insert into profile values('110', 'orochimaru', 'ME', 'female', '5626589745')

1 row created.

SQL> /

Enter value for name: tsunade

Enter value for mailid: tsunade@gmail.com

Enter value for degree: MTech

Enter value for gender: female

Enter value for ph\_no: 7856324584

old 1: insert into profile values('&name', '&mailid', '&degree', '&gender', '&ph\_no')

new 1: insert into profile values('tsunade', 'tsunade@gmail.com', 'MTech', 'female', '7856324584')

1 row created.

SQL> select \*from profile;

NAME MAILID DEGRE GENDER PH\_NO

-------------------- -------------------- ----- ------ ----------

naruto naru@gmail.com MCA male 5689562458

hashirama hashi@gmail.com MCA male 6532689555

hinata hina@gmail.com MCA female 895624578

sasuke sas@gmail.com MBA male 568923564

tsunade tsu@gmail.com ME female 4568956635

110 orochimaru ME female 5626589745

tsunade tsunade@gmail.com MTech female 7856324584

7 rows selected.

SQL> roll back;

Rollback complete.

SQL> delete from profile where name='110';

0 rows deleted.

SQL> insert into profile values('&name', '&mailid', '&degree', '&gender', '&ph\_no');

Enter value for name: kiba

Enter value for mailid: kiba@gmail.com

Enter value for degree: MCA

Enter value for gender: male

Enter value for ph\_no: 4589652356

old 1: insert into profile values('&name', '&mailid', '&degree', '&gender', '&ph\_no')

new 1: insert into profile values('kiba', 'kiba@gmail.com', 'MCA', 'male', '4589652356')

1 row created.

SQL> /

Enter value for name: shino

Enter value for mailid: shi@gmail.com

Enter value for degree: BTech

Enter value for gender: male

Enter value for ph\_no: 8956234578

old 1: insert into profile values('&name', '&mailid', '&degree', '&gender', '&ph\_no')

new 1: insert into profile values('shino', 'shi@gmail.com', 'BTech', 'male', '8956234578')

1 row created.

SQL> savepoint s;

Savepoint created.

SQL> select \*from profile;

NAME MAILID DEGRE GENDER PH\_NO

-------------------- -------------------- ----- ------ ----------

naruto naru@gmail.com MCA male 5689562458

hashirama hashi@gmail.com MCA male 6532689555

hinata hina@gmail.com MCA female 895624578

sasuke sas@gmail.com MBA male 568923564

tsunade tsu@gmail.com ME female 4568956635

kiba kiba@gmail.com MCA male 4589652356

shino shi@gmail.com BTech male 8956234578

7 rows selected.

SQL> rollback to s;

Rollback complete.

SQL> select \*from profile;

NAME MAILID DEGRE GENDER PH\_NO

-------------------- -------------------- ----- ------ ----------

naruto naru@gmail.com MCA male 5689562458

hashirama hashi@gmail.com MCA male 6532689555

hinata hina@gmail.com MCA female 895624578

sasuke sas@gmail.com MBA male 568923564

tsunade tsu@gmail.com ME female 4568956635

kiba kiba@gmail.com MCA male 4589652356

shino shi@gmail.com BTech male 8956234578

7 rows selected.

SQL> commit;

Commit complete.

**RESULT:**

Thus the transfer control language queries has been executed successfully

**Ex. No:**

**Date:**

**DB Objects**

**AIM:**

To execute DB Objects.

**QUERIES:**

1. VIEW
2. COMPLEX VIEW
3. INDEX
4. SEQUENCE
5. SYNONYM

SQL> create view v as select \*from profile;

View created.

SQL> select \*from v;

NAME MAILID DEGRE GENDER PH\_NO

-------------------- -------------------- ----- ------ ----------

naruto naru@gmail.com MCA male 5689562458

hashirama hashi@gmail.com MCA male 6532689555

hinata hina@gmail.com MCA female 895624578

sasuke sas@gmail.com MBA male 568923564

tsunade tsu@gmail.com ME female 4568956635

kiba kiba@gmail.com MCA male 4589652356

shino shi@gmail.com BTech male 8956234578

7 rows selected.

SQL> alter table profile add age integer

Table altered.

SQL> alter table profile drop column age;

Table altered.

SQL> alter table profile add pno integer;

Table altered.

SQL> create sequence s1 start with 100 increment by 1;

Sequence created.

SQL> update profile set pno=s1.nextval where name='naruto';

1 row updated.

SQL> update profile set pno=s1.nextval where name='hinata';

1 row updated.

SQL> update profile set pno=s1.nextval where name='kiba';

1 row updated.

SQL> update profile set pno=s1.nextval where name='hashirama';

1 row updated.

SQL> create view v2 as select name, mailid, degree from profile;

View created.

SQL> select \*from v2;

NAME MAILID DEGRE

-------------------- -------------------- -----

naruto naru@gmail.com MCA

hashirama hashi@gmail.com MCA

hinata hina@gmail.com MCA

sasuke sas@gmail.com MBA

tsunade tsu@gmail.com ME

kiba kiba@gmail.com MCA

shino shi@gmail.com BTech

7 rows selected.

SQL> select \*from v;

NAME MAILID DEGRE GENDER PH\_NO

-------------------- -------------------- ----- ------ ----------

naruto naru@gmail.com MCA male 5689562458

hashirama hashi@gmail.com MCA male 6532689555

hinata hina@gmail.com MCA female 895624578

sasuke sas@gmail.com MBA male 568923564

tsunade tsu@gmail.com ME female 4568956635

kiba kiba@gmail.com MCA male 4589652356

shino shi@gmail.com BTech male 8956234578

7 rows selected.

SQL> commit;

Commit complete.

SQL> select \*from v;

NAME MAILID DEGRE GENDER PH\_NO

-------------------- -------------------- ----- ------ ----------

naruto naru@gmail.com MCA male 5689562458

hashirama hashi@gmail.com MCA male 6532689555

hinata hina@gmail.com MCA female 895624578

sasuke sas@gmail.com MBA male 568923564

tsunade tsu@gmail.com ME female 4568956635

kiba kiba@gmail.com MCA male 4589652356

shino shi@gmail.com BTech male 8956234578

7 rows selected.

SQL> select \*from profile;

NAME MAILID DEGRE GENDER PH\_NO PNO

-------------------- -------------------- ----- ------ ---------- ----------

naruto naru@gmail.com MCA male 5689562458 100

hashirama hashi@gmail.com MCA male 6532689555 103

hinata hina@gmail.com MCA female 895624578 101

sasuke sas@gmail.com MBA male 568923564

tsunade tsu@gmail.com ME female 4568956635

kiba kiba@gmail.com MCA male 4589652356 102

shino shi@gmail.com BTech male 8956234578

7 rows selected.

SQL> create synonym prof for profile;

Synonym created.

SQL> select \*from prof

NAME MAILID DEGRE GENDER PH\_NO PNO

-------------------- -------------------- ----- ------ ---------- ----------

naruto naru@gmail.com MCA male 5689562458 100

hashirama hashi@gmail.com MCA male 6532689555 103

hinata hina@gmail.com MCA female 895624578 101

sasuke sas@gmail.com MBA male 568923564

tsunade tsu@gmail.com ME female 4568956635

kiba kiba@gmail.com MCA male 4589652356 102

shino shi@gmail.com BTech male 8956234578

7 rows selected.

SQL> insert into prof values('ino', 'ino@gmail.com', 'BTech', 'female', '5689784585', s1.nextval);

1 row created.

SQL> select \*from prof;

NAME MAILID DEGRE GENDER PH\_NO PNO

-------------------- -------------------- ----- ------ ---------- ----------

naruto naru@gmail.com MCA male 5689562458 100

hashirama hashi@gmail.com MCA male 6532689555 103

hinata hina@gmail.com MCA female 895624578 101

sasuke sas@gmail.com MBA male 568923564

tsunade tsu@gmail.com ME female 4568956635

kiba kiba@gmail.com MCA male 4589652356 102

shino shi@gmail.com BTech male 8956234578

ino ino@gmail.com BTech female 5689784585 104

8 rows selected.

**RESULT:**

Thus the queries using DB objects are executed successfully

**Ex. No:**

**Date:**

**Single Row Function**

**AIM:**

To write queries for single row function

**QUERIES:**

1. CHARACTER FUNCTIONS
2. NUMERIC FUNCTIONS
3. DATE FUNCTIONS

SQL> select \*from profile;

NAME MAILID DEGRE GENDER PH\_NO PNO

-------------------- -------------------- ----- ------ ---------- ----------

naruto naru@gmail.com MCA male 5689562458 100

hashirama hashi@gmail.com MCA male 6532689555 103

hinata hina@gmail.com MCA female 895624578 101

sasuke sas@gmail.com MBA male 568923564

tsunade tsu@gmail.com ME female 4568956635

kiba kiba@gmail.com MCA male 4589652356 102

shino shi@gmail.com BTech male 8956234578

ino ino@gmail.com BTech female 5689784585 104

8 rows selected.

SQL> select concat(name, gender) from profile;

CONCAT(NAME,GENDER)

--------------------------

narutomale

hashiramamale

hinatafemale

sasukemale

tsunadefemale

kibamale

shinomale

inofemale

8 rows selected.

SQL> select substr(name, 0, 4) from profile;

SUBS

----

naru

hash

hina

sasu

tsun

kiba

shin

ino

8 rows selected.

SQL> select instr(name, 'a'), name, mailid from profile;

INSTR(NAME,'A') NAME MAILID

--------------- -------------------- --------------------

2 naruto naru@gmail.com

2 hashirama hashi@gmail.com

4 hinata hina@gmail.com

2 sasuke sas@gmail.com

5 tsunade tsu@gmail.com

4 kiba kiba@gmail.com

0 shino shi@gmail.com

0 ino ino@gmail.com

8 rows selected.

SQL> select lpad(name, 8, '#'), degree from profile;

LPAD(NAM DEGRE

-------- -----

##naruto MCA

hashiram MCA

##hinata MCA

##sasuke MBA

#tsunade ME

####kiba MCA

###shino BTech

#####ino BTech

8 rows selected.

SQL> select rpad(name, 8, '#'), degree, gender from profile;

RPAD(NAM DEGRE GENDER

-------- ----- ------

naruto## MCA male

hashiram MCA male

hinata## MCA female

sasuke## MBA male

tsunade# ME female

kiba#### MCA male

shino### BTech male

ino##### BTech female

8 rows selected.

SQL> select upper(name), degree, gender from profile;

UPPER(NAME) DEGRE GENDER

-------------------- ----- ------

NARUTO MCA male

HASHIRAMA MCA male

HINATA MCA female

SASUKE MBA male

TSUNADE ME female

KIBA MCA male

SHINO BTech male

INO BTech female

8 rows selected.

SQL> select lower(name), degree, gender from profile;

LOWER(NAME) DEGRE GENDER

-------------------- ----- ------

naruto MCA male

hashirama MCA male

hinata MCA female

sasuke MBA male

tsunade ME female

kiba MCA male

shino BTech male

ino BTech female

8 rows selected.

SQL> select initcap(name), degree, gender from profile;

INITCAP(NAME) DEGRE GENDER

-------------------- ----- ------

Naruto MCA male

Hashirama MCA male

Hinata MCA female

Sasuke MBA male

Tsunade ME female

Kiba MCA male

Shino BTech male

Ino BTech female

8 rows selected.

SQL> select length(name), degree, gender from profile;

LENGTH(NAME) DEGRE GENDER

------------ ----- ------

6 MCA male

9 MCA male

6 MCA female

6 MBA male

7 ME female

4 MCA male

5 BTech male

3 BTech female

8 rows selected.

SQL> select round(3.144) from dual;

ROUND(3.144)

------------

3

SQL> select ceil(3.144) from dual;

CEIL(3.144)

-----------

4

SQL> select floor(3.144) from dual;

FLOOR(3.144)

------------

3

SQL> select power(3, 6) from dual;

POWER(3,6)

----------

729

SQL> select mod(3, 6) from dual;

MOD(3,6)

----------

3

SQL> select sysdate from dual;

SYSDATE

---------

23-MAR-22

SQL> select to\_char(sysdate, 'MM') from dual

TO

--

03

SQL> select to\_char(sysdate, 'YEAR') from dual;

TO\_CHAR(SYSDATE,'YEAR')

------------------------------------------

TWENTY TWENTY-TWO

**RESULT:**

Thus the single row function are executed successfully

**Ex. No:**

**Date:**

**Aggregate Function**

**AIM:**

To execute aggregate functions

**QUERIES:**

1. MIN
2. MAX
3. AVERAGE
4. SUM
5. COUNT
6. ORDER BY
7. GROUP BY
8. HAVING

SQL> create table employee(eno integer primary key, ename varchar2(20), jobtitle varchar2(20), degree varchar2(10), age integer, yoe integer, salary integer);

Table created.

SQL> insert into employee values(&eno, '&ename', '&jjobtitle', '&degree', &age, &yoe, &salary);

Enter value for eno: 1001

Enter value for ename: kiba

Enter value for jjobtitle: software engineer

Enter value for degree: MCA

Enter value for age: 34

Enter value for yoe: 6

Enter value for salary: 100000

old 1: insert into employee values(&eno, '&ename', '&jjobtitle', '&degree', &age, &yoe, &salary)

new 1: insert into employee values(1001, 'kiba', 'software engineer', 'MCA', 34, 6, 100000)

1 row created.

SQL> insert into employee values(&eno, '&ename', '&jobtitle', '&degree', &age, &yoe, &salary);

Enter value for eno: 1002

Enter value for ename: shino

Enter value for jobtitle: web developer

Enter value for degree: MCA

Enter value for age: 36

Enter value for yoe: 7

Enter value for salary: 150000

old 1: insert into employee values(&eno, '&ename', '&jobtitle', '&degree', &age, &yoe, &salary)

new 1: insert into employee values(1002, 'shino', 'web developer', 'MCA', 36, 7, 150000)

1 row created.

SQL> /

Enter value for eno: 1003

Enter value for ename: iruka

Enter value for jobtitle: senior developer

Enter value for degree: MTech

Enter value for age: 67

Enter value for yoe: 12

Enter value for salary: 500000

old 1: insert into employee values(&eno, '&ename', '&jobtitle', '&degree', &age, &yoe, &salary)

new 1: insert into employee values(1003, 'iruka', 'senior developer', 'MTech', 67, 12, 500000)

1 row created.

SQL> /

Enter value for eno: 1004

Enter value for ename: choji

Enter value for jobtitle: chef

Enter value for degree: BTech

Enter value for age: 38

Enter value for yoe: 4

Enter value for salary: 80000

old 1: insert into employee values(&eno, '&ename', '&jobtitle', '&degree', &age, &yoe, &salary)

new 1: insert into employee values(1004, 'choji', 'chef', 'BTech', 38, 4, 80000)

1 row created.

SQL> /

Enter value for eno: 1005

Enter value for ename: konohamaru

Enter value for jobtitle: android developer

Enter value for degree: BTech

Enter value for age: 32

Enter value for yoe: 7

Enter value for salary: 200000

old 1: insert into employee values(&eno, '&ename', '&jobtitle', '&degree', &age, &yoe, &salary)

new 1: insert into employee values(1005, 'konohamaru', 'android developer', 'BTech', 32, 7, 200000)

1 row created.

SQL> /

Enter value for eno: 1006

Enter value for ename: asuma

Enter value for jobtitle: manager

Enter value for degree: MBA

Enter value for age: 56

Enter value for yoe: 11

Enter value for salary: 300000

old 1: insert into employee values(&eno, '&ename', '&jobtitle', '&degree', &age, &yoe, &salary)

new 1: insert into employee values(1006, 'asuma', 'manager', 'MBA', 56, 11, 300000)

1 row created.

SQL> /

Enter value for eno: 1007

Enter value for ename: hiruzen

Enter value for jobtitle: HR

Enter value for degree: MBA

Enter value for age: 89

Enter value for yoe: 21

Enter value for salary: 1000000

old 1: insert into employee values(&eno, '&ename', '&jobtitle', '&degree', &age, &yoe, &salary)

new 1: insert into employee values(1007, 'hiruzen', 'HR', 'MBA', 89, 21, 1000000)

1 row created.

SQL> select \*from employee;

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1001 kiba software engineer MCA 34

6 100000

1002 shino web developer MCA 36

7 150000

1003 iruka senior developer MTech 67

12 500000

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1004 choji chef BTech 38

4 80000

1005 konohamaru android developer BTech 32

7 200000

1006 asuma manager MBA 56

11 300000

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1007 hiruzen HR MBA 89

21 1000000

7 rows selected.

SQL> select count(ename), degree from employee group by degree;

COUNT(ENAME) DEGREE

------------ ----------

2 MBA

2 BTech

2 MCA

1 MTech

SQL> select count(ename), degree from employee group by degree having sum(salary)>500000;

COUNT(ENAME) DEGREE

------------ ----------

2 MBA

SQL> select sum(salary) from employee;

SUM(SALARY)

-----------

2330000

SQL> select avg(salary) from employee;

AVG(SALARY)

-----------

332857.143

SQL> commit;

Commit complete.

SQL> select degree, min(salary) from employee group by degree;

DEGREE MIN(SALARY)

---------- -----------

MBA 300000

BTech 80000

MCA 100000

MTech 500000

SQL> select degree, max(salary) from employee group by degree;

DEGREE MAX(SALARY)

---------- -----------

MBA 1000000

BTech 200000

MCA 150000

MTech 500000

SQL> select \*from employee where age = (select min(age) from employee);

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1005 konohamaru android developer BTech 32

7 200000

SQL> select \*from employee where age = (select max(age) from employee);

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1007 hiruzen HR MBA 89

21 1000000

SQL> select \*from employee where age = (select max(salary) from employee);

no rows selected

SQL> select \*from employee where salary = (select max(salary) from employee);

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1007 hiruzen HR MBA 89

21 1000000

SQL> select \*from employee where salary = (select min(salary) from employee);

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1004 choji chef BTech 38

4 80000

SQL> select ename, jobtitle, degree, salary from employee order by age desc;

ENAME JOBTITLE DEGREE SALARY

-------------------- -------------------- ---------- ----------

hiruzen HR MBA 1000000

iruka senior developer MTech 500000

asuma manager MBA 300000

choji chef BTech 80000

shino web developer MCA 150000

kiba software engineer MCA 100000

konohamaru android developer BTech 200000

7 rows selected.

**RESULT:**

Thus queries for aggregagte functions is executed successfully

**Ex. No:**

**Date:**

**Set Operations**

**AIM:**

To write queries for set Set Operations

**QUERIES:**

1. UNION
2. UNION ALL
3. INTERSECTION
4. MINUS

SQL> create table personal\_data(no integer, name varchar2(20), job varchar2(20), degree varchar2(20), age integer, yoe integer, salary integer);

Table created.

SQL> insert into personal\_data values(&no, '&name', '&job', '&degree', &age, &yoe, &salary);

Enter value for no: 1001

Enter value for name: kiba

Enter value for job: software developer

Enter value for degree: MCA

Enter value for age: 34

Enter value for yoe: 6

Enter value for salary: 100000

old 1: insert into personal\_data values(&no, '&name', '&job', '&degree', &age, &yoe, &salary)

new 1: insert into personal\_data values(1001, 'kiba', 'software developer', 'MCA', 34, 6, 100000)

1 row created.

SQL> /

Enter value for no: 1002

Enter value for name: shino

Enter value for job: web developer

Enter value for degree: MCA

Enter value for age: 36

Enter value for yoe: 7

Enter value for salary: 150000

old 1: insert into personal\_data values(&no, '&name', '&job', '&degree', &age, &yoe, &salary)

new 1: insert into personal\_data values(1002, 'shino', 'web developer', 'MCA', 36, 7, 150000)

1 row created.

SQL> /

Enter value for no: 1003

Enter value for name: iruka

Enter value for job: senior developer

Enter value for degree: MTech

Enter value for age: 67

Enter value for yoe: 12

Enter value for salary: 500000

old 1: insert into personal\_data values(&no, '&name', '&job', '&degree', &age, &yoe, &salary)

new 1: insert into personal\_data values(1003, 'iruka', 'senior developer', 'MTech', 67, 12, 500000)

1 row created.

SQL> /

Enter value for no: 1004

Enter value for name: choji

Enter value for job: chef

Enter value for degree: BTech

Enter value for age: 38

Enter value for yoe: 4

Enter value for salary: 80000

old 1: insert into personal\_data values(&no, '&name', '&job', '&degree', &age, &yoe, &salary)

new 1: insert into personal\_data values(1004, 'choji', 'chef', 'BTech', 38, 4, 80000)

1 row created.

SQL> /

Enter value for no: 1007

Enter value for name: ino

Enter value for job: app developer

Enter value for degree: BTech

Enter value for age: 38

Enter value for yoe: 7

Enter value for salary: 400000

old 1: insert into personal\_data values(&no, '&name', '&job', '&degree', &age, &yoe, &salary)

new 1: insert into personal\_data values(1007, 'ino', 'app developer', 'BTech', 38, 7, 400000)

1 row created.

SQL> /

Enter value for no: 1008

Enter value for name: rin

Enter value for job: web developer

Enter value for degree: BTech

Enter value for age: 37

Enter value for yoe: 8

Enter value for salary: 350000

old 1: insert into personal\_data values(&no, '&name', '&job', '&degree', &age, &yoe, &salary)

new 1: insert into personal\_data values(1008, 'rin', 'web developer', 'BTech', 37, 8, 350000)

1 row created.

SQL> /

Enter value for no: 1009

Enter value for name: obito

Enter value for job: cyber security

Enter value for degree: MTech

Enter value for age: 41

Enter value for yoe: 8

Enter value for salary: 300000

old 1: insert into personal\_data values(&no, '&name', '&job', '&degree', &age, &yoe, &salary)

new 1: insert into personal\_data values(1009, 'obito', 'cyber security', 'MTech', 41, 8, 300000)

1 row created.

SQL> select \*from personal\_data;

NO NAME JOB DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1001 kiba software developer MCA

34 6 100000

1002 shino web developer MCA

36 7 150000

1003 iruka senior developer MTech

67 12 500000

NO NAME JOB DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1004 choji chef BTech

38 4 80000

1007 ino app developer BTech

38 7 400000

1008 rin web developer BTech

37 8 350000

NO NAME JOB DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1009 obito cyber security MTech

41 8 300000

7 rows selected.

SQL> select \*from employee union select \*from personal\_data;

ENO ENAME JOBTITLE DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1001 kiba software developer MCA

34 6 100000

1001 kiba software engineer MCA

34 6 100000

1002 shino web developer MCA

36 7 150000

ENO ENAME JOBTITLE DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1003 iruka senior developer MTech

67 12 500000

1004 choji chef BTech

38 4 80000

1005 konohamaru android developer BTech

32 7 200000

ENO ENAME JOBTITLE DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1006 asuma manager MBA

56 11 300000

1007 hiruzen HR MBA

89 21 1000000

1007 ino app developer BTech

38 7 400000

ENO ENAME JOBTITLE DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1008 rin web developer BTech

37 8 350000

1009 obito cyber security MTech

41 8 300000

11 rows selected.

SQL> select \*from employee union all select \*from personal\_data;

ENO ENAME JOBTITLE DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1001 kiba software engineer MCA

34 6 100000

1002 shino web developer MCA

36 7 150000

1003 iruka senior developer MTech

67 12 500000

ENO ENAME JOBTITLE DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1004 choji chef BTech

38 4 80000

1005 konohamaru android developer BTech

32 7 200000

1006 asuma manager MBA

56 11 300000

ENO ENAME JOBTITLE DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1007 hiruzen HR MBA

89 21 1000000

1001 kiba software developer MCA

34 6 100000

1002 shino web developer MCA

36 7 150000

ENO ENAME JOBTITLE DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1003 iruka senior developer MTech

67 12 500000

1004 choji chef BTech

38 4 80000

1007 ino app developer BTech

38 7 400000

ENO ENAME JOBTITLE DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1008 rin web developer BTech

37 8 350000

1009 obito cyber security MTech

41 8 300000

14 rows selected.

SQL> select \*from employee intersect select \*from personal\_data;

ENO ENAME JOBTITLE DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1002 shino web developer MCA

36 7 150000

1003 iruka senior developer MTech

67 12 500000

1004 choji chef BTech

38 4 80000

SQL> select \*from employee minus select \*from personal\_data;

ENO ENAME JOBTITLE DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1001 kiba software engineer MCA

34 6 100000

1005 konohamaru android developer BTech

32 7 200000

1006 asuma manager MBA

56 11 300000

ENO ENAME JOBTITLE DEGREE

---------- -------------------- -------------------- --------------------

AGE YOE SALARY

---------- ---------- ----------

1007 hiruzen HR MBA

89 21 1000000

**RESULT:**

Thus the set operation queries has been executed successfully

**Ex. No:**

**Date:**

**SQL JOINS**

**AIM:**

To execute SQL Joins.

**QUERIES:**

1. INNER JOIN
2. LEFT JOIN
3. RIGHT JOIN
4. FULL JOIN
5. CROSS JOIN
6. SELF JOIN
7. NATURAL JOIN

SQL> select \*from registration;

NAME MAILID PASSWORD

-------------------- -------------------- --------------------

LOCATION

--------------------

naruto naru@gmail.com naru123

konoha

hinata hina@gmail.com hina123

konoha

sakura sa@gmail.com sa000

shanghai

NAME MAILID PASSWORD

-------------------- -------------------- --------------------

LOCATION

--------------------

sasuke sas123 sas@gmail.com

shanghai

kiba ki@gmail.com ki123

dalian

chiji chi@gmail.com chi123

dalian

6 rows selected.

SQL> select \*from JobPortalProfile;

NAME MAILID DEGREE YOE PHNO

-------------------- -------------------- ---------- ---------- -----------

GENDER

----------

naruto naru@gmail.com MCA 5 568956425

male

hinata hina@gmail.com MCA 5 8956245785

female

madara mad@gmail.com ME 6 7856986535

male

NAME MAILID DEGREE YOE PHNO

-------------------- -------------------- ---------- ---------- -----------

GENDER

----------

obito tobi@gmail.com ME 4 5689521564

male

jiraya jiraya@gmail.com MTech 13 5689562356

male

tsunade tsuna@gmail.com MTech 11 5623789545

female

6 rows selected.

SQL> select p.name, p.mailid, p.degree, r.location from JobPortalProfile p inner join registration r on p.mailid=r.mailid;

NAME MAILID DEGREE LOCATION

-------------------- -------------------- ---------- --------------------

naruto naru@gmail.com MCA konoha

hinata hina@gmail.com MCA konoha

SQL> select p.name, p.mailid, p.degree, r.location from JobPortalProfile p left join registration r on p.mailid=r.mailid;

NAME MAILID DEGREE LOCATION

-------------------- -------------------- ---------- --------------------

naruto naru@gmail.com MCA konoha

hinata hina@gmail.com MCA konoha

madara mad@gmail.com ME

obito tobi@gmail.com ME

jiraya jiraya@gmail.com MTech

tsunade tsuna@gmail.com MTech

6 rows selected.

SQL> select p.name, p.mailid, p.degree, r.location from JobPortalProfile p right join registration r on p.mailid=r.mailid;

NAME MAILID DEGREE LOCATION

-------------------- -------------------- ---------- --------------------

naruto naru@gmail.com MCA konoha

hinata hina@gmail.com MCA konoha

dalian

shanghai

dalian

shanghai

6 rows selected.

SQL> select p.name, p.mailid, p.degree, r.location from JobPortalProfile p cross join registration r;

NAME MAILID DEGREE LOCATION

-------------------- -------------------- ---------- --------------------

naruto naru@gmail.com MCA konoha

hinata hina@gmail.com MCA konoha

madara mad@gmail.com ME konoha

obito tobi@gmail.com ME konoha

jiraya jiraya@gmail.com MTech konoha

tsunade tsuna@gmail.com MTech konoha

naruto naru@gmail.com MCA konoha

hinata hina@gmail.com MCA konoha

madara mad@gmail.com ME konoha

obito tobi@gmail.com ME konoha

jiraya jiraya@gmail.com MTech konoha

NAME MAILID DEGREE LOCATION

-------------------- -------------------- ---------- --------------------

tsunade tsuna@gmail.com MTech konoha

naruto naru@gmail.com MCA shanghai

hinata hina@gmail.com MCA shanghai

madara mad@gmail.com ME shanghai

obito tobi@gmail.com ME shanghai

jiraya jiraya@gmail.com MTech shanghai

tsunade tsuna@gmail.com MTech shanghai

naruto naru@gmail.com MCA shanghai

hinata hina@gmail.com MCA shanghai

madara mad@gmail.com ME shanghai

obito tobi@gmail.com ME shanghai

NAME MAILID DEGREE LOCATION

-------------------- -------------------- ---------- --------------------

jiraya jiraya@gmail.com MTech shanghai

tsunade tsuna@gmail.com MTech shanghai

naruto naru@gmail.com MCA dalian

hinata hina@gmail.com MCA dalian

madara mad@gmail.com ME dalian

obito tobi@gmail.com ME dalian

jiraya jiraya@gmail.com MTech dalian

tsunade tsuna@gmail.com MTech dalian

naruto naru@gmail.com MCA dalian

hinata hina@gmail.com MCA dalian

madara mad@gmail.com ME dalian

NAME MAILID DEGREE LOCATION

-------------------- -------------------- ---------- --------------------

obito tobi@gmail.com ME dalian

jiraya jiraya@gmail.com MTech dalian

tsunade tsuna@gmail.com MTech dalian

36 rows selected.

SQL> select p.name, p.mailid, p.degree, r.location from JobPortalProfile p, registration r where r.mailid=p.mailid and r.name <> p.name;

no rows selected

SQL> select p.name, p.mailid, p.degree, r.location from JobPortalProfile p, registration r where r.mailid <> p.mailid;

NAME MAILID DEGREE LOCATION

-------------------- -------------------- ---------- --------------------

hinata hina@gmail.com MCA konoha

madara mad@gmail.com ME konoha

obito tobi@gmail.com ME konoha

jiraya jiraya@gmail.com MTech konoha

tsunade tsuna@gmail.com MTech konoha

naruto naru@gmail.com MCA konoha

madara mad@gmail.com ME konoha

obito tobi@gmail.com ME konoha

jiraya jiraya@gmail.com MTech konoha

tsunade tsuna@gmail.com MTech konoha

naruto naru@gmail.com MCA shanghai

NAME MAILID DEGREE LOCATION

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hinata hina@gmail.com MCA shanghai

madara mad@gmail.com ME shanghai

obito tobi@gmail.com ME shanghai

jiraya jiraya@gmail.com MTech shanghai

tsunade tsuna@gmail.com MTech shanghai

naruto naru@gmail.com MCA shanghai

hinata hina@gmail.com MCA shanghai

madara mad@gmail.com ME shanghai

obito tobi@gmail.com ME shanghai

jiraya jiraya@gmail.com MTech shanghai

tsunade tsuna@gmail.com MTech shanghai

NAME MAILID DEGREE LOCATION

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naruto naru@gmail.com MCA dalian

hinata hina@gmail.com MCA dalian

madara mad@gmail.com ME dalian

obito tobi@gmail.com ME dalian

jiraya jiraya@gmail.com MTech dalian

tsunade tsuna@gmail.com MTech dalian

naruto naru@gmail.com MCA dalian

hinata hina@gmail.com MCA dalian

madara mad@gmail.com ME dalian

obito tobi@gmail.com ME dalian

jiraya jiraya@gmail.com MTech dalian

NAME MAILID DEGREE LOCATION

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tsunade tsuna@gmail.com MTech dalian

34 rows selected.

**RESULT:**

Thus the joins queries has been executed successfully

**Ex. No:**

**Date:**

**PL/SQL**

**AIM:**

To write basic pl/sql program

**USING IF THEN:**

SQL> set serveroutput on;

SQL> declare

2 n integer;

3 begin

4 n := &n;

5 if mod(n, 2)=0 then

6 dbms\_output.put\_line('even number');

7 else

8 dbms\_output.put\_line('odd number');

9 end if;

10 end;

11 /

Enter value for n: 45

old 4: n := &n;

new 4: n := 45;

odd number

PL/SQL procedure successfully completed.

**USING WHILE LOOP**

SQL> declare

2 n integer;

3 x integer;

4 i integer;

5 begin

6 n := &n;

7 x := &x;

8 i:=1;

9 while i<=n loop

10 dbms\_output.put\_line(i||' \* '||x||' = '||i\*x);

11 i := i+1;

12 end loop;

13 end;

14 /

Enter value for n: 10

old 6: n := &n;

new 6: n := 10;

Enter value for x: 6

old 7: x := &x;

new 7: x := 6;

1 \* 6 = 6

2 \* 6 = 12

3 \* 6 = 18

4 \* 6 = 24

5 \* 6 = 30

6 \* 6 = 36

7 \* 6 = 42

8 \* 6 = 48

9 \* 6 = 54

10 \* 6 = 60

PL/SQL procedure successfully completed.

**USING FOR LOOP**

**FINDING PRIME NUMBERS**

SQL> set serveroutput on;

SQL> declare

2 n integer;

3 i integer;

4 j integer;

5 flag boolean;

6 begin

7 n := &n;

8 dbms\_output.put\_line('prime numbers');

9 for i in 2..n loop

10 flag := true;

11 for j in 2..i/2 loop

12 if mod(i, j)=0 then

13 flag:=false;

14 exit;

15 end if;

16 end loop;

17 if flag then

18 dbms\_output.put\_line(i||' ');

19 end if;

20 end loop;

21 end;

22 /

Enter value for n: 56

old 7: n := &n;

new 7: n := 56;

prime numbers

2

3

5

7

11

13

17

19

23

29

31

37

41

43

47

53

PL/SQL procedure successfully completed.

**RESULT:**

Thus the queries for basic pl/sql has been executed successfully

**Ex. No:**

**Date:**

**PROCEDURES**

**AIM:**

To create a procedure and perform the some operations base on our requirement

**QUERIES:**

1. BASIC PROCEDURE OR PROCEDURE WITH NO PARAMETER
2. PROCEDURE WITH IN PARAMETER
3. PROCEDURE WITH OUT PARAMETER
4. PROCEDURE WITH IN OUT PARAMETER
5. DROPPINT PROCEDURE

**PROGRAM**

**BASIC PROCEDURE**

SQL> create or replace procedure findCountMCA is

2 ncount integer;

3 begin

4 select count(\*) into ncount from profile where degree='MCA';

5 dbms\_output.put\_line('Number profiles comes under MCA : '||ncount);

6 end findCountMCA;

7 /

Procedure created.

SQL> exec findCountMCA;

Number profiles comes under MCA : 4

PL/SQL procedure successfully completed.

**PROCEDURE WITH IN PARAMETER**

SQL> create or replace procedure findDetails(mail in profile.mailid%type) is

2 ename profile.name%type;

3 deg profile.degree%type;

4 phno profile.ph\_no%type;

5 begin

6 select name into ename from profile where mailid = mail;

7 select degree into deg from profile where mailid = mail;

8 select ph\_no into phno from profile where mailid = mail;

9 dbms\_output.put\_line('NAME : '||ename);

10 dbms\_output.put\_line('DEGREE : '||deg);

11 dbms\_output.put\_line('PHONE NUMBER : '||phno);

12 end findDetails;

13 /

Procedure created.

SQL> declare

2 mail profile.mailid%type;

3 begin

4 mail := &mail;

5 findDetails(mail);

6 end;

7 /

Enter value for mail: 'naru@gmail.com'

old 4: mail := &mail;

new 4: mail := 'naru@gmail.com';

NAME : naruto

DEGREE : MCA

PHONE NUMBER : 5689562458

PL/SQL procedure successfully completed.

**PROCEDURE WITH OUT PARAMETER**

SQL> create or replace procedure findName(ename out profile.name%type, mail out profile.mailid%type) is

2 email JobPortalProfile .mailid%type;

3 begin

4 select mailid into email from JobPortalProfile where yoe = (select min(yoe) from JobPortalProfile);

5 select name into ename from profile where mailid = email;

6 select mailid into mail from profile where mailid = email;

7 end findName;

8 /

Procedure created.

SQL> declare

2 mail profile.mailid%type;

3 ename profile.name%type;

4 begin

5 findName(ename, mail);

6 dbms\_output.put\_line('Low experience profile '||ename||' - '||mail);

7 end;

8 /

Low experience profile obito - tobi@gmail.com

PL/SQL procedure successfully completed.

**PROCEDURE WITH IN OUT PARAMETER**

SQL> create or replace procedure find(deg in profile.degree%type, ncount out integer)

2 is

3 begin

4 select count(\*) into ncount from profile where degree = deg;

5 end find;

6 /

Procedure created.

SQL> declare

2 deg profile.degree%type;

3 ncount integer;

4 begin

5 deg := &deg;

6 find(deg, ncount);

7 dbms\_output.put\_line('Number of '||deg||' profiles : '||ncount);

8 end;

9 /

Enter value for deg: 'MCA'

old 5: deg := &deg;

new 5: deg := 'MCA';

Number of MCA profiles : 4

PL/SQL procedure successfully completed.

**RESULT:**

Thus the queries for procedure in PL/SQL has been executed successfully

**Ex. No:**

**Date:**

**FUNCTIONS**

**AIM:**

To create a function and perform the some operations base on our requirement

**QUERIES:**

1. BASIC FUNCTION OR FUNCTION WITH NO PARAMETER
2. FUNCTION WITH IN PARAMETER
3. FUNCTION WITH IN OUT PARAMETER
4. RECURSIVE FUNCTION
5. DROPPING FUNCTION

**PROGRAM**

**BASIC FUNCTION**

SQL> create or replace function getProf return profile.name%type

2 is

3 ename profile.name%type;

4 begin

5 select name into ename from profile where mailid='sas@gmail.com';

6 return ename;

7 end getProf;

8 /

Function created.

SQL> set serveroutput on;

SQL> declare

2 begin

3 dbms\_output.put\_line('NAME : '||getProf);

4 end;

5 /

NAME : sasuke

PL/SQL procedure successfully completed.

**FUNCTION WITH IN PARAMETER**

SQL> create or replace function maxSal(no1 in integer, no2 in integer)

2 return integer

3 is

4 s1 integer;

5 s2 integer;

6 begin

7 select salary into s1 from employee where eno=no1;

8 select salary into s2 from employee where eno=no2;

9 if s1>s1 then

10 return no1;

11 else

12 return no2;

13 end if;

14 end maxSal;

15 /

Function created.

SQL> declare

2 n1 integer;

3 n2 integer;

4 name1 employee.ename%type;

5 begin

6 n1 := &n1;

7 n2 := &n2;

8 select ename into name1 from employee where eno=maxSal(n1, n2);

9 dbms\_output.put\_line('Name : '||name1);

10 end;

11 /

Enter value for n1: 1002

old 6: n1 := &n1;

new 6: n1 := 1002;

Enter value for n2: 1005

old 7: n2 := &n2;

new 7: n2 := 1005;

Name : konohamaru

PL/SQL procedure successfully completed.

**FUNCTION WITH IN OUT PARAMETER**

SQL> set serveroutput on;

SQL>

SQL> declare

2 mail profile.mailid%type;

3 temp integer;

4 begin

5 mail := &mail;

6 temp := getName(mail);

7 dbms\_output.put\_line('mail id :'||mail);

8 end;

9 /

Enter value for mail: 'naru@gmail.com'

old 5: mail := &mail;

new 5: mail := 'naru@gmail.com';

mail id :naru@gmail.com

PL/SQL procedure successfully completed.

SQL> set serveroutput on;

SQL>

SQL> declare

2 mail profile.mailid%type;

3 temp integer;

4 begin

5 mail := &mail;

6 temp := getName(mail);

7 dbms\_output.put\_line('mail id :'||mail);

8 end;

9 /

Enter value for mail: 'naru@gmail.com'

old 5: mail := &mail;

new 5: mail := 'naru@gmail.com';

mail id :naru@gmail.com

PL/SQL procedure successfully completed.

**RESULT:**

Thus the queries for function in PL/SQL has been executed successfully

**Ex. No:**

**Date:**

**CURSOR**

**AIM:**

To write queries for cursor in pl/sql.

**QUERIES:**

SQL> DECLARE

2 ename profile.name%type;

3 mail profile.mailid%type;

4 deg profile.degree%type;

5 gen profile.gender%type;

6 phno profile.ph\_no%type;

7 p\_no profile.pno%type;

8 cursor prof is select name, mailid, degree, gender, ph\_no, pno from profile;

9 BEGIN

10 OPEN prof;

11 LOOP

12 FETCH prof into ename, mail, deg, gen, phno, p\_no;

13 EXIT WHEN prof%notfound;

14 dbms\_output.put\_line(ename || ' ' || mail || ' ' || deg || ' '||gen||' '||phno||' '||p\_no);

15 END LOOP;

16 CLOSE prof;

17 END;

18 /

naruto naru@gmail.com MCA male 5689562458 100

hashirama hashi@gmail.com MCA male 6532689555 103

hinata hina@gmail.com MCA female 895624578 101

sasuke sas@gmail.com MBA male 568923564

tsunade tsu@gmail.com ME female 4568956635

kiba kiba@gmail.com MCA male 4589652356 102

shino shi@gmail.com BTech male 8956234578

ino ino@gmail.com BTech female 5689784585 104

obito tobi@gmail.com ME male 456235689 100

PL/SQL procedure successfully completed.

SQL> DECLARE

2 CURSOR jobs IS SELECT name, degree FROM JobSeekers;

3 ename JobSeekers.name%type;

4 deg JobSeekers.degree%type;

5 BEGIN

6 OPEN jobs;

7 LOOP

8 FETCH jobs INTO ename, deg;

9 IF jobs%NOTFOUND

10 THEN

11 EXIT;

12 END IF;

13 Dbms\_output.put\_line('NAME : '||ename||' DEGREE : '||deg);

14 END LOOP;

15 CLOSE jobs;

16 END;

17 /

NAME : naruto DEGREE : MCA

NAME : hinata DEGREE : MCA

NAME : sakura DEGREE : ME

NAME : sasuke DEGREE : ME

NAME : kiba DEGREE : MTech

NAME : shino DEGREE : BE

PL/SQL procedure successfully completed.

**RESULT:**

Thus the queries for cursor in PL/SQL has been executed successfully

**Ex. No:**

**Date:**

**EXCEPTION HANDLING**

**AIM:**

To write queries for exception in pl/sql.

**QUERIES:**

SQL> DECLARE

2 ename profile.name%type;

3 mail profile.mailid%type;

4 BEGIN

5 SELECT name, mailid INTO ename, mail FROM profile WHERE pno = 120;

6 DBMS\_OUTPUT.PUT\_LINE ('Name: '|| ename);

7 DBMS\_OUTPUT.PUT\_LINE ('Mail: ' || mail);

8

9 EXCEPTION

10 WHEN no\_data\_found THEN

11 dbms\_output.put\_line('No such customer!');

12 WHEN others THEN

13 dbms\_output.put\_line('Error!');

14 END;

15 /

No such customer!

PL/SQL procedure successfully completed.

SQL> DECLARE

2 firstexception EXCEPTION;

3 j profile.mailid%type;

4 BEGIN

5 FOR j IN (SELECT \* FROM profile) LOOP

6 IF j.mailid = 'naruto@gmail.com' THEN

7 RAISE firstexception;

8 END IF;

9 END LOOP;

10 EXCEPTION

11 WHEN firstexception THEN

12 dbms\_output.put\_line (Exception occurs.');

13 END;

14 /

PL/SQL procedure successfully completed.

SQL> DECLARE

2 sales NUMBER;

3 commission NUMBER;

4 BEGIN

5 sales := &n\_sales;

6 CASE

7 WHEN sales > 200000 THEN

8 commission := 0.2;

9 WHEN sales >= 100000 AND sales < 200000 THEN

10 commission := 0.15;

11 WHEN sales >= 50000 AND sales < 100000 THEN

12 commission := 0.1;

13 WHEN sales > 30000 THEN

14 commission := 0.05;

15 ELSE

16 commission := 0;

17 END CASE;

18 EXCEPTION

19 when CASE\_NOT\_FOUND THEN

20 DBMS\_OUTPUT.PUT\_LINE('INPUT MATCH NOT FOUND');

21

22 DBMS\_OUTPUT.PUT\_LINE( 'Commission is ' || commission \* 100 || '%');

23 END;

24 /

Enter value for n\_sales: 150000

old 5: sales := &n\_sales;

new 5: sales := 150000;

PL/SQL procedure successfully completed.

SQL> /

Enter value for n\_sales: 1000

old 5: sales := &n\_sales;

new 5: sales := 1000;

PL/SQL procedure successfully completed.

**RESULT:**

Thus the queries for exception in PL/SQL has been executed successfully

**Ex. No:**

**Date:**

**TRIGGERS**

**AIM:**

To write queries for triggers in pl/sql.

**QUERIES:**

SQL> create or replace trigger salDiff

2 before delete or insert or update on employee

3 for each row

4 declare

5 diff integer;

6 begin

7 diff := :new.salary - :old.salary;

8 dbms\_output.put\_line('old salary : '||:old.salary);

9 dbms\_output.put\_line('new salary : '||:new.salary);

10 dbms\_output.put\_line('diff salary : '||diff);

11 end;

12 /

Trigger created.

SQL> update employee set salary=200000 where eno=1001;

old salary : 100000

new salary : 200000

diff salary : 100000

1 row updated.

SQL> create or replace trigger hr\_event\_trig

2 after logon

3 on schema

4 begin

5 insert into hr\_event\_audit values(ora\_sysevent, sysdate, to\_char(sysdate, 'hh24:mi:ss'), sysdate, to\_char(sysdate, 'hh24:mi:ss'), sys\_context('USERENV', 'CURRENT\_USER'));

6 commit;

7 end;

8 /

Trigger created.

SQL> disconnect;

Disconnected from Oracle Database 10g Express Edition Release 10.2.0.1.0 - Production

SQL> connect system

Enter password:

Connected.

SQL> select \*from hr\_event\_audit;

EVENT\_TYPE LOGON\_DAT LOGON\_TIME LOGOF\_DAT LOGOF\_TIME

--------------- --------- --------------- --------- ---------------

USER\_TYPE

---------------

LOGON 24-MAR-22 10:27:27

LOGON 24-MAR-22 10:28:31 24-MAR-22 10:28:31

LOGOFF 24-MAR-22 10:30:23 24-MAR-22 10:30:23

EVENT\_TYPE LOGON\_DAT LOGON\_TIME LOGOF\_DAT LOGOF\_TIME

--------------- --------- --------------- --------- ---------------

USER\_TYPE

---------------

LOGON 24-MAR-22 10:33:29 24-MAR-22 10:33:29

SYSTEM

LOGON 24-MAR-22 21:48:41 24-MAR-22 21:48:41

SYSTEM

LOGON 24-MAR-22 23:32:38 24-MAR-22 23:32:38

SYSTEM

6 rows selected.

SQL> create or replace trigger schema\_trigger

2 after DDL

3 on schema

4 begin

5 insert into schema\_audit values(sysdate, sys\_context('USERENV', 'CURRENT\_USER'), ora\_dict\_obj\_type, ora\_dict\_obj\_name, ora\_sysevent);

6 end;

7 /

Trigger created.

SQL> create table tough4(no integer, name varchar2(20));

Table created.

SQL> select \*from schema\_audit;

SYS\_DATE DDL\_USER OBJECT\_CREATE OBJECT\_NAME

--------- -------------------- -------------------- --------------------

DDL\_OP

--------------------

24-MAR-22 SYSTEM TABLE ROUGH3

CREATE

24-MAR-22 SYSTEM TABLE ROUGH3

ALTER

24-MAR-22 SYSTEM TABLE ROUGH3

DROP

SYS\_DATE DDL\_USER OBJECT\_CREATE OBJECT\_NAME

--------- -------------------- -------------------- --------------------

DDL\_OP

--------------------

24-MAR-22 SYSTEM TABLE HR\_EVENT\_AUDIT

CREATE

24-MAR-22 SYSTEM TRIGGER HR\_EVENT\_TRIG

CREATE

24-MAR-22 SYSTEM TRIGGER HR\_EVENT\_TRIG

CREATE

SYS\_DATE DDL\_USER OBJECT\_CREATE OBJECT\_NAME

--------- -------------------- -------------------- --------------------

DDL\_OP

--------------------

24-MAR-22 SYSTEM TRIGGER HR\_EVENT\_TRIG

CREATE

24-MAR-22 SYSTEM TRIGGER HR\_EVENT\_TRIG

CREATE

24-MAR-22 SYSTEM TRIGGER HR\_EVENT\_TRIG

CREATE

SYS\_DATE DDL\_USER OBJECT\_CREATE OBJECT\_NAME

--------- -------------------- -------------------- --------------------

DDL\_OP

--------------------

24-MAR-22 SYSTEM TABLE HR\_EVENT\_AUDIT

ALTER

24-MAR-22 SYSTEM TRIGGER HR\_EVENT\_TRIG

CREATE

24-MAR-22 SYSTEM TRIGGER HR\_EVENT\_TRIG

CREATE

SYS\_DATE DDL\_USER OBJECT\_CREATE OBJECT\_NAME

--------- -------------------- -------------------- --------------------

DDL\_OP

--------------------

24-MAR-22 SYSTEM VIEW V1

CREATE

24-MAR-22 SYSTEM VIEW V1

DROP

24-MAR-22 SYSTEM VIEW V1

CREATE

SYS\_DATE DDL\_USER OBJECT\_CREATE OBJECT\_NAME

--------- -------------------- -------------------- --------------------

DDL\_OP

--------------------

24-MAR-22 SYSTEM FUNCTION GETNAME

CREATE

24-MAR-22 SYSTEM FUNCTION GETNAME

CREATE

24-MAR-22 SYSTEM TRIGGER SALDIFF

CREATE

**RESULT:**

Thus the queries for triggers in PL/SQL has been executed successfully

**Ex. No:**

**Date:**

**PACKAGES**

**AIM:**

To write queries for packages in pl/sql.

**QUERIES:**

**PACKAGE CREATION**

SQL> create or replace package main\_package

2 as

3 procedure getDetails(mail profile.mailid%type);

4 procedure getcount;

5 procedure getCountDegree(deg profile.degree%type);

6 procedure getMaxSal;

7 procedure getMinSal;

8 end main\_package;

9 /

Package created.

**PACKAGE BODY CREATION**

SQL> create or replace package body main\_package

2 as

3 procedure getDetails(mail profile.mailid%type)

4 is

5 ename profile.name%type;

6 deg profile.degree%type;

7 phno profile.ph\_no%type;

8 gen profile.gender%type;

9 begin

10 select name, degree, phno, gender into ename, deg, phno, gen from profile where mailid=mail;

11 dbms\_output.put\_line('NAME : '||ename);

12 dbms\_output.put\_line('DEGREE : '||deg);

13 dbms\_output.put\_line('GENDER : '||gen);

14 dbms\_output.put\_line('PHONE NUMBER : '||phno);

15 end getDetails;

16 procedure getCount

17 is

18 ncount integer;

19 begin

20 select count(\*) into ncount from JobSeekers;

21 dbms\_output.put\_line('Total records on Job seekers : '||ncount);

22 end getCount;

23 procedure getCountDegree(deg profile.degree%type)

24 is

25 ncount integer;

26 begin

27 select count(\*) into ncount from profile where degree=deg;

28 dbms\_output.put\_line('Total records : '||ncount);

29 end getCountDegree;

30 procedure getMaxSal

31 is

32 nmax integer;

33 begin

34 select max(salary) into nmax from employee;

35 dbms\_output.put\_line('MAX SALARY : '||nmax);

36 end getMaxSal;

37 procedure getMinSal

38 is

39 nmin integer;

40 begin

41 select min(salary) into nmin from employee;

42 dbms\_output.put\_line('MIN SALARY : '||nmin);

43 end getMinSal;

44 end main\_package;

45 /

Package body created.

SQL> set serveroutput on;

SQL> declare

2 begin

3 main\_package.getDetails('hina@gmail.com');

4 main\_package.getCount;

5 main\_package.getCountDegree('MCA');

6 main\_package.getMaxSal;

7 main\_package.getMinSal;

8 end;

9 /

NAME : hinata

DEGREE : MCA

GENDER : female

PHONE NUMBER :

Total records on Job seekers : 6

Total records : 4

MAX SALARY : 1000000

MIN SALARY : 80000

PL/SQL procedure successfully completed.

**RESULT:**

Thus the queries for packages in PL/SQL has been executed successfully

**Ex. No:**

**Date:**

**SUBQUERIES**

**AIM:**

To write queries for subqueries

**QUERIES:**

1. SINGLE ROW SUBQUERY
2. MULTI ROW SUBQUERY
3. CORELATED SUBQUERY

SQL> connect system

Enter password:

Connected.

SQL> select \*from employee;

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1001 kiba software engineer MCA 34

6 200000

1002 shino web developer MCA 36

7 150000

1003 iruka senior developer MTech 67

12 500000

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1004 choji chef BTech 38

4 80000

1005 konohamaru android developer BTech 32

7 200000

1006 asuma manager MBA 56

11 300000

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1007 hiruzen HR MBA 89

21 1000000

7 rows selected.

SQL> select \*from JobPortalDegrees;

DNO DEGREENAME

---------- ----------

101 MCA

102 MBA

103 ME

104 MTech

105 BTech

106 BE

6 rows selected.

SQL> select ename, jobtitle, salary from employee where degree in (select degreename from JobPortalDegrees where dno=101);

ENAME JOBTITLE SALARY

-------------------- -------------------- ----------

kiba software engineer 200000

shino web developer 150000

SQL> select ename, jobtitle, salary from employee where degree in (select degreename from JobPortalDegrees where dno=102);

ENAME JOBTITLE SALARY

-------------------- -------------------- ----------

asuma manager 300000

hiruzen HR 1000000

SQL> select ename, jobtitle, salary from employee where degree in (select degreename from JobPortalDegrees where dno=103);

no rows selected

SQL> select ename, jobtitle, salary from employee where degree in (select degreename from JobPortalDegrees where dno=104);

ENAME JOBTITLE SALARY

-------------------- -------------------- ----------

iruka senior developer 500000

SQL> select ename, jobtitle, salary from employee where degree in (select degreename from JobPortalDegrees where dno=105);

ENAME JOBTITLE SALARY

-------------------- -------------------- ----------

choji chef 80000

konohamaru android developer 200000

SQL> select ename, jobtitle, salary from employee where degree in (select degreename from JobPortalDegrees where dno=106);

no rows selected

SQL> select \*from employee where salary = (select min(salary) from employee);

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1004 choji chef BTech 38

4 80000

SQL> select \*from employee where salary = (select max(salary) from employee);

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1007 hiruzen HR MBA 89

21 1000000

SQL> select count(eno) from employee where degree in (select degree from employee group by degree);

COUNT(ENO)

----------

7

SQL> select count(eno) from employee where degree in (select degree from employee group by degree having degree='MCA');

COUNT(ENO)

----------

2

SQL> select count(eno), max(salary) from employee where degree in (select degree from employee group by degree having degree=(select degreename from JobPortalDegrees where dno=105));

COUNT(ENO) MAX(SALARY)

---------- -----------

2 200000

SQL> select count(eno), max(salary) from employee where degree in (select degree from employee group by degree having degree=(select degreename from JobPortalDegrees where dno=101));

COUNT(ENO) MAX(SALARY)

---------- -----------

2 200000

SQL> select count(eno), max(salary) from employee where degree in (select degree from employee group by degree having degree=(select degreename from JobPortalDegrees where dno=104));

COUNT(ENO) MAX(SALARY)

---------- -----------

1 500000

SQL> select \*from employee where salary not in (select max(salary) from employee);

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1001 kiba software engineer MCA 34

6 200000

1002 shino web developer MCA 36

7 150000

1003 iruka senior developer MTech 67

12 500000

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1004 choji chef BTech 38

4 80000

1005 konohamaru android developer BTech 32

7 200000

1006 asuma manager MBA 56

11 300000

6 rows selected.

SQL> select \*from employee where salary=any(select max(salary) from employee);

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1007 hiruzen HR MBA 89

21 1000000

SQL> select \*from employee where salary=all(select max(salary) from employee);

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1007 hiruzen HR MBA 89

21 1000000

SQL> select \*from employee where exists(select jd.degreename, e.jobtitle from JobPortalDegrees jd, employee e where jd.degreename=e.degree);

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1001 kiba software engineer MCA 34

6 200000

1002 shino web developer MCA 36

7 150000

1003 iruka senior developer MTech 67

12 500000

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1004 choji chef BTech 38

4 80000

1005 konohamaru android developer BTech 32

7 200000

1006 asuma manager MBA 56

11 300000

ENO ENAME JOBTITLE DEGREE AGE

---------- -------------------- -------------------- ---------- ----------

YOE SALARY

---------- ----------

1007 hiruzen HR MBA 89

21 1000000

7 rows selected.

**RESULT:**

Thus the subqueries has been executed successfully