SRI RAMAKRISHNA MISSION VIDYALAYA

COLLEGE OF ARTS AND SCIENCE

[AUTONOMOUS]

COIMBATORE - 641 020

October – 2024

DEPARTMENT OF COMPUTER SCIENCE

NAME :

Reg. No. : 23USC0

SEMESTER : III

COURSE : RDBMS LAB

COURSE CODE : 23USC3CP3

SRI RAMAKRISHNA MISSION VIDYALAYA

COLLEGE OF ARTS AND SCIENCE

[AUTONOMOUS]

COIMBATORE - 641 020

DEPARTMENT OF COMPUTER SCIENCE

BONAFIDE CERTIFICATE

This to be certified that it is a bonafide record work done by _____ Reg.No._____

in "**RDBMS LAB**" for the Third semester during October 2024 and submitted for the Semester Practical Examination held on_____.

STAFF IN CHARGE **HEAD OF DEPARTMENT**

INTERNAL EXAMINER **EXTERNAL EXAMINER**

Index

EX NO-1 **IMPLEMENTING DDL COMMANDS**

A) Creating a table :

SQL> create table emp(empno number(4),ename varchar2(10),designation varchar2(10),salary number(8,2));
Table created.

B) Inserting the values into the table

SQL> insert into emp values('&empno','&ename','&designation','&salary');
Enter value for empno: 101
Enter value for ename: rajkumar
Enter value for designation: manager
Enter value for salary: 500000
1 row created.
SQL> /
Enter value for empno: 102
Enter value for ename: nishanth
Enter value for designation: as.manager
Enter value for salary: 30000
1 row created.
SQL> /
Enter value for empno: 103
Enter value for ename: riswinth
Enter value for designation: officer
Enter value for salary: 25000
1 row created.
SQL> /
Enter value for empno: 104
Enter value for ename: seenivasan
Enter value for designation: staff
Enter value for salary: 15000
1 row created.
SQL> /
Enter value for empno: 105
Enter value for ename: rosan
Enter value for designation: staff
Enter value for salary: 20000
1 row created.

C) To See the description of a table:

```
SQL> desc emp1;
 Name                                      Null?    Type
 ----------------------------------------- -------- -------
 EMPNO                                              NUMBER(4)
 ENAME                                              VARCHAR2(10)
 DESIGNATION                                        VARCHAR2(10)
 SALARY                                             NUMBER(8,2)
```

D) To List all details of the table "emp"

```
SQL> select * from emp;

    EMPNO      ENAME        DESIGNATION       SALARY
    ----------      --------- --       -------- ---------       -----------
      101          dilipkumar        manager            500000
      102          nisanth          as.manager           30000
      103          riswinth          officer              25000
      104          seenivasan         staff               15000
      105          rosan             staff               20000
```

E) Copying a table (or) creating a new table using keyword "as"

```
SQL> create table emp1 as select * from emp;
Table created.
SQL> select * from emp1;
        EMPNO      ENAME        DESIGNATION       SALARY
        ----------      --------- --       -------- ---------       -----------

        101        dilipkumar              manager       500000
        102       nisanth             as.manager     30000
        103       riswinth          officer             25000
        104       seenivasan         staff             15000
        105        rosan                  staff         20000
```

F) To Change the size of the field "empno".

```
SQL> alter table emp modify empno number(6);
Table altered.
SQL> desc emp;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 EMPNO                                              NUMBER(6)
 ENAME                                              VARCHAR2(10)
 DESIGNATION                                        VARCHAR2(10)
 SALARY                                             NUMBER(8,2)
```

G) To add a new column “qualification” in the table “emp”

```
SQL> alter table emp add(qualification varchar2(10));
Table altered.
SQL> select * from emp;
    EMPNO   ENAME      DESIGNATIO     SALARY       QUALIFICAT
---------- ---------- ---------- ---------- -------------------- ---------- ----------
       101     dilipkumar       manager       500000
       102     nisanth          as.manager     30000
       103      riswinth          officer        25000
       104     seenivasan        staff          15000
       105     rosan             staff          20000
```

H) To Drop a column from the table “emp”.

```
SQL> alter table emp drop column salary;
Table altered.
SQL> slect * from emp;
    EMPNO ENAME        DESIGNATIO         QUALIFICAT
---------- ---------- ---------- -------------------- ---------- ----------
       101     dilipkumar    manager
       102     nisanth       as.manager
       103     riswinth      officer
       104     seenivasan    staff
       105      rosan          staff
```

I) To Drop a table “emp”.

```
SQL> drop table emp;
Table dropped.
SQL> slect * from emp;
```

EX.No. 2 IMPLEMENTING DML COMMANDS

Create table:

SQL> create table ex2(staffno number(10),staffname varchar2(10),age number(3),deptname varchar2(10));
Table created.

Description of ex2 table:

SQL> desc ex2;

Name	Null?	Type
STAFFNO		NUMBER(10)
STAFFNAME		VARCHAR2(10)
AGE		NUMBER(3)
DEPTNAME		VARCHAR2(10)

Add phoneno and address column to ex2 table:

SQL> alter table ex2 add(phoneno number(10),address varchar2(10));
Table altered.

Insert values to ex2 table:

SQL> insert into ex2 values(10,'saravana',21,'tshirt',9876543210,'cbe');
1 row created.

SQL> insert into ex2 values(11,'vignesh',22,'saries',8973595195,'mtp');
1 row created.
SQL> insert into ex2 values(12,'saravan',22,'sales',5236987410,'cbe');
1 row created.
SQL> insert into ex2 values(13,'rajesh',21,'marketing',2514368970,'cbe');
1 row created.
SQL> insert into ex2 values(14,'sabi',22,'marketing',995898935,'mtp');
1 row created.

To display ALL the records in ex2 table:

SQL> select * from ex2;

STAFFNO	STAFFNAME	AGE	DEPTNAME	PHONENO	ADDRESS
10	saravana	21	tshirt	9876543210	cbe
11	vignesh	22	saries	8973595195	mtp
12	saravan	22	sales	5236987410	cbe
13	rajesh	21	marketing	2514368970	cbe
14	sabi	22	marketing	9958989355	mtp

Add salary column to ex2 table:

SQL> alter table ex2 add(salary number(5));
Table altered.

Description of ex2 table:

SQL> desc ex2;

Name	Null?	Type
STAFFNO		NUMBER(10)
STAFFNAME		VARCHAR2(10)
AGE		NUMBER(3)
DEPTNAME		VARCHAR2(10)
PHONENO		NUMBER(10)
ADDRESS		VARCHAR2(10)
SALARY		NUMBER(5)

Update salary to staffno=10:

SQL> update ex2 set salary=10000 where staffno=10;

1 row updated.

Update salary to staffno=14:

SQL> update ex2 set salary=12000 where staffno=14;

1 row updated.

Display the ex2 table:

SQL> select * from ex2;

STAFFNO	STAFFNAME	AGE	DEPTNAME	PHONENO	ADDRESS	SALARY
10	saravana	21	tshirt	9876543210	cbe	10000
11	vignesh	22	saries	8973595195	mtp	
12	saravan	22	sales	5236987410	cbe	
13	rajesh	21	marketing	2514368970	cbe	
14	sabi	22	marketing	9958989355	mtp	12000

Delete the detail whos staffno=11:

SQL> delete from ex2 where staffno=11;

1 row deleted.

Display the ex2 table:

SQL> select * from ex2;

STAFFNO	STAFFNAME	AGE	DEPTNAME	PHONENO	ADDRESS	SALARY
10	saravana	21	tshirt	9876543210	cbe	10000
12	saravan	22	sales	5236987410	cbe	
13	rajesh	21	marketing	2514368970	cbe	
14	sabi	22	marketing	9958989355	mtp	12000

To display PARTICULAR columns from the ex2 table:

SQL> **select** staffname, salaryy from ex2;

To display PARTICULAR rows (records) from the ex2 table:

SQL> **select** * from ex2 where staffname=rajesh;

Display the ex2 table:

SQL> select * from ex2;

STAFFNO	STAFFNAME	DEPTNAME	PHONENO	ADDRESS	SALARY
10	saravana	tshirt	9876543210	cbe	10000
12	saravan	sales	5236987410	cbe	
13	rajesh	marketing	2514368970	cbe	
14	sabi	marketing	9958989355	mtp	12000

EX NO-3 STUDENT MARKLIST

Queries:

Creating a table:

```
SQL> create table  studmark(sno number(2),name varchar2(20),regno varchar2(8)primary
key,tamil number(2),english number(2),clanguage number(2),dbms number(2),total
number(3),result varchar2(4));
Table created.
```

To see the description of the table:

```
SQL> desc studmark;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------
 SNO                                                NUMBER(2)
 NAME                                               VARCHAR2(20)
 REGNO                                              NOT NULL VARCHAR2(8)
 TAMIL                                              NUMBER(2)
 ENGLISH                                            NUMBER(2)
 CLANGUAGE                                          NUMBER(2)
 DBMS                                               NUMBER(2)
 TOTAL                                              NUMBER(3)
 RESULT                                             VARCHAR2(4)
```

A) To insert marklist records into the table

```
SQL> insert into studmark values('&sno','&name','&regno','&tamil','&english','&c
language','&dbms','&total','&result');
Enter value for sno: 01
Enter value for name: arun
Enter value for regno: 17usc001
Enter value for tamil: 40
Enter value for english: 96
Enter value for clanguage: 58
Enter value for dbms: 63
Enter value for total: 257
Enter value for result: pass
1 row created.
SQL> /
Enter value for sno: 02
Enter value for name: boopathi
Enter value for regno: 17usc002
```

Enter value for tamil: 69
Enter value for english: 89
Enter value for clanguage: 74
Enter value for dbms: 51
Enter value for total: 283
Enter value for result: pass
1 row created.
SQL> /
Enter value for sno: 03
Enter value for name: dharsan
Enter value for regno: 17usc003
Enter value for tamil: 89
Enter value for english: 98
Enter value for clanguage: 78
Enter value for dbms: 96
Enter value for total: 361
Enter value for result: pass
1 row created.
SQL> /
Enter value for sno: 04
Enter value for name: dilipkumar
Enter value for regno: 17usc004
Enter value for tamil: 94
Enter value for english: 89
Enter value for clanguage: 85
Enter value for dbms: 99
Enter value for total: 367
Enter value for result: pass
1 row created.
SQL> /
Enter value for sno: 05
Enter value for name: seenivasan
Enter value for regno: 17usc043
Enter value for tamil: 78
Enter value for english: 91
Enter value for clanguage: 92
Enter value for dbms: 90
Enter value for total: 351
Enter value for result: pass
SQL> /
Enter value for sno: 06
Enter value for name: elavarasan
Enter value for regno: 17usc006
Enter value for tamil: 56
Enter value for english: 63

Enter value for clanguage: 12
Enter value for dbms: 25
Enter value for total: 156
Enter value for result: fail

B) To list all the students name who passed in clanguage and dbms

SQL> select name,clanguage,dbms from studmark where clanguage>=35 and dbms>=35;

NAME	CLANGUAGE	DBMS
arun	58	63
boopathi	74	51
dharsan	78	96
dilipkumar	85	99
seenivasan	92	90

C) To list all the name of the students who passed in English

SQL> select name,english from studmark where english>=35;

NAME	ENGLISH
arun	96
boopathi	89
dharsan	98
dilipkumar	89
seenivasan	91
elavarasan	63

D) To list the student details whose total mark greater than 300

SQL> select * from studmark where total>=300;

SNO	NAME	REGNO	TAMIL	ENGLISH	CLANGUAGE	DBMS	TOTAL	RESU
3	dharsan	17usc003	89	98	78	96	361	pass
4	dilipkumar	17usc004	94	89	85	99	367	pass
5	seenivasan	17usc043	78	91	92	90	351	pass

EX NO-4 EMPLOYEE DETAILS

Queries:

To create a table:

SQL> create table employee(empno varchar2(10),ename varchar2(20),dob date,brno varchar2(15),dept varchar2(15),desig,varchar2(30),salary number(10));
Table created.

To see the description of a table:

SQL> desc employee;

Name	Null?	Type
EMPNO		VARCHAR2(10)
ENAME		VARCHAR2(20)
DOB		DATE
BRNO		VARCHAR2(15)
DEPT		VARCHAR2(15)
DESIG		VARCHAR2(30)
SALARY		NUMBER(10)

A) Inserting the employee records into the table

SQL> insert into employee
values('&empno','&ename','&dob','&brno','&dept','&desig','&salary');

Enter value for empno: 01
Enter value for ename: guruprasad
Enter value for dob: 15-feb-99
Enter value for brno: 0123
Enter value for dept: financial
Enter value for desig: ceo
Enter value for salary: 30000
1 row created.
SQL> /
Enter value for empno: 02
Enter value for ename: dilip
Enter value for dob: 25-feb-01
Enter value for brno: 0133
Enter value for dept: marketing
Enter value for desig: staff
Enter value for salary: 20000

```
1 row created.
SQL> insert into employee
values('&empno','&ename','&dob','&brno','&dept','&desig','&salary');
  Enter value for empno: 03
Enter value for ename: arun
Enter value for dob: 10-aug-02
Enter value for brno: 458
Enter value for dept: financial
Enter value for desig: manager
Enter value for salary: 8000
1 row created.
SQL> /
Enter value for empno: 04
Enter value for ename: harikrishnan
Enter value for dob: 07-mar-95
Enter value for brno:012
Enter value for dept: financial
Enter value for desig: staff
Enter value for salary: 5000
1 row created.
SQL> insert into employee values('&empno','&ename','&dob','&brno','&dept','&desi
g','&salary');
Enter value for empno: 05
Enter value for ename: satish
Enter value for dob: 12-dec-05
Enter value for brno: 478
Enter value for dept: marketing
Enter value for desig: staff
Enter value for salary: 15000
1 row created.
```

B) Listing all the employee details

```
SQL> select * from employee;

EMPNO  ENAME          DOB           BRNO          DEPT        DESIG                SALARY
--------- -------------------- --------- --------------- ------------------------ -------------------- ---------------
01        guruprasad       15-FEB-99     0123          financial        ceo                    30000
02        dilip            25-FEB-01    0133          marketing      staff                  20000
03        arun             10-AUG-02       458          financial       manager                8000
04        harikrishnan     07-MAR-95       012          financial          staff                5000
05        satish           12-DEC-05       478          marketing      staff                  15000
```

C) Listing the name of the employee whose name starts with 'A'

```
SQL>  select ename from employee where ename like 'a%';

EMPNO  ENAME          DOB          BRNO         DEPT       DESIG                SALARY
--------- -------------------- --------- --------------- ------------------------ -------------------- ---------------
03       arun             10-AUG-02    458          financial       manager                    8000
```

D) Listing the employee who get salary more than 10,000

```
SQL> select * from employee where salary>=10000;

EMPNO  ENAME          DOB          BRNO         DEPT         DESIG                SALARY
--------- -------------------- --------- --------------- ------------------------ -------------------- ---------------
01       guruprasad     15-FEB-99     0123          financial            ceo                    30000
02       dilip             25-FEB-01  0133          marketing        staff                    20000
05       satish            12-DEC-05     478          marketing        staff                    15000
```

E) Listing the name of the employees in marketing department

```
SQL> select ename from employee where dept='marketing';
ENAME
-------------
Dilip
Satish
```

F) Listing the name of the employees in financial dept who get sal below than 10,000

```
SQL> select ename from employee where dept='financial' and salary<=10000;
ENAME
--------------------
arun
harikrishnan
```

G) Listing the name of the employee who joined after 2,000

```
SQL> select * from employee where dob>='01-jan-00';
EMPNO  ENAME          DOB          BRNO         DEPT       DESIG                SALARY
--------- -------------------- --------- --------------- ------------------------ -------------------- ---------------
02       dilip             25-FEB-01    0133          marketing       staff                    20000
03       arun              10-AUG-02       458          financial       manager                    8000
05       satish            12-DEC-05       478          marketing     staff                    15000
```

EXNO 5 CUSTOMER DETAILS

Queries:

```
SQL> create table customer(custname varchar2(20),gender varchar2(6),dob date,typ
e varchar2(10),address varchar2(50), city varchar2(15),lastpurchased date);
Table created.

SQL> desc customer;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 CUSTNAME                                           VARCHAR2(20)
 GENDER                                             VARCHAR2(6)
 DOB                                                DATE
 TYPE                                               VARCHAR2(10)
 ADDRESS                                            VARCHAR2(50)
 CITY                                               VARCHAR2(15)
 LASTPURCHASED                                      DATE
```

A) To insert customer records into the table

```
SQL> insert into customer values('&custname','&gender','&dob','&type','&address,'
&city','&lastpurchased');

Enter value for custname: dilip
Enter value for gender: male
Enter value for dob: 25-feb-99
Enter value for type: cash
Enter value for address: 50,athipalayam
Enter value for city: coimbatore
Enter value for lastpurchased: 20-sep-18
old   1: insert into customer values('&custname','&gender','&dob','&type','&addr
ess','&city','&lastpurchased')
new   1: insert into customer values('dilip','male','25-feb-99','cash','50,athip
alayam','coimbatore','20-sep-18')

1 row created.

SQL> /
Enter value for custname: riswinth
Enter value for gender: male
Enter value for dob: 10-aug-99
Enter value for type: credit
Enter value for address: 123/4,mettupalayam
```

```
Enter value for city: coimbatore
Enter value for lastpurchased: 23-sep-18
1 row created.
SQL> /
Enter value for custname: hema
Enter value for gender: female
Enter value for dob: 10-jan-04
Enter value for type: credit
Enter value for address: 3,nehru street
Enter value for city: karur
Enter value for lastpurchased: 10-jul-17
1 row created.
SQL> /
Enter value for custname: seenivasan
Enter value for gender: male
Enter value for dob: 19-aug-99
Enter value for type: credit
Enter value for address: 10,panayampalli
Enter value for city: erode
Enter value for lastpurchased: 10-apr-18
1 row created.
SQL> /
Enter value for custname: kishore
Enter value for gender: male
Enter value for dob: 15-mar-98
Enter value for type: cash
Enter value for address: 15,karamadai
Enter value for city: coimbatore
Enter value for lastpurchased: 12-may-18
1 row created.

SQL> select * from customer;
CUSTNAME  GENDER  DOB        TYPE       ADDRESS                          CITY
LASTPURCH
-------------------------------------------------- ---------- ------------------------------ ------ --------- --------------
-- --------- dilip          male      25-FEB-99  cash       50,athipalayam                   coimbatore
20-SEP-18
riswinth   male       10-AUG-99  credit     1/4,mettupalayam                 coimbatore       23-
SEP-18
hema   female         10-JAN-04  credit     3,nehru street                   coimbatore       10-
JUL-17
seenivasan   male      19-AUG-99  credit   10,panayampalli                    erode            10-
APR-18
kishore          male   15-MAR-98  cash     15,karamadai                     coimbatore       12-
MAY-18
```

B) To List all male customers

```
SQL> select * from customer where gender='male';

CUSTNAME  GENDER  DOB        TYPE       ADDRESS                              CITY
LASTPURCH
-------------------------------------------------- ---------- ------------------------------ ------ --------- ----------
dilip         male   25-FEB-99 cash50,athipalayam                          coimbatore     20-SEP-18
riswinth   male   10-AUG-99 credit1/4,mettupalayam                        coimbatore     23-SEP-18
seenivasan          male   19-AUG-99 credit10,panayampalli               erode          10-APR-18
kishore             male   15-MAR-98 cash15,karamadai                    coimbatore     12-MAY-18
```

C) To list all female customers who live in Coimbatore

```
SQL> select * from customer where gender='female' and city='coimbatore';
CUSTNAME  GENDER  DOB        TYPE       ADDRESS                              CITY
LASTPURCH
-------------------------------------------------- ---------- ------------------------------ ------ --------- ----------
hema    female 10-JAN-04 credit3,nehru street                              coimbatore     10-JUL-17
```

D) To select all customers bought things for credit

```
SQL> select * from customer where type='credit';

CUSTNAME  GENDER  DOB        TYPE       ADDRESS                CITY                 LASTPURCH
-------------------------------------------------- ---------- ------------------------------ ------ --------- ----------
riswinth    male   10-AUG-99 credit 123/4,mettupalayam                coimbatore     23-SEP-18
hema        female 10-JAN-04 credit3,nehru street                     coimbatore     10-JUL-17
seenivasan          male   19-AUG-99 credit10,panayampalli           erode          10-APR-18
```

EX NO-6 FIBONACCI SERIES AND FACTORIAL

Queries:

```
SQL> set serveroutput on
SQL> declare
  2  fact number:=1;
  3  no number:=&num;
  4  a number:=-1;
  5  b number:=1;
  6  c number;
  7   i number;
  8   begin
  9   dbms_output.put_line('factorial and fibonacci');
 10   dbms_output.put_line('fibonacci series');
 11   for i in 1..no
 12   loop
 13   fact:=fact*i;
 14   c:=a+b;
 15   a:=b;
 16   b:=c;
 17   dbms_output.put_line(c);
 18   end loop;
 19   dbms_output.put_line('factorial='||fact);end;
 20  /
```

OUTPUT

```
Enter value for num: 5
old   3: no number:=&num;
new   3: no number:=5;
factorial and fibonacci
fibonacci series
0
1
1
2
3
factorial=120
PL/SQL procedure successfully completed.
```

EX NO-7 STUDENT DATABASE

Queries:

SQL> create table stud(rno varchar2(6),name varchar2(10),dob date,course varchar2(8),dept varchar2(8),sem varchar2(2),per number(3));
Table created.

SQL> desc stud;

Name	Null?	Type
RNO		VARCHAR2(6)
NAME		VARCHAR2(10)
DOB		DATE
COURSE		VARCHAR2(8)
DEPT		VARCHAR2(8)
SEM		VARCHAR2(2)
PER		NUMBER(3)

A) To Insert the records into the table

SQL> insert into stud values('&ro','&name','&dob','&course','&dept','&sem','&per');

Enter value for ro: 101
Enter value for name: rishwinth
Enter value for dob: 10-feb-99
Enter value for course: bsc
Enter value for dept: it
Enter value for sem: 3
Enter value for per: 75.3
1 row created.

SQL> /
Enter value for ro: 102
Enter value for name: dilip
Enter value for dob: 25-feb-99
Enter value for course: bsc
Enter value for dept: maths
Enter value for sem: 3
Enter value for per: 73.3
1 row created.
SQL> /
Enter value for ro: 103
Enter value for name: kishore
Enter value for dob: 15-mar-98

```
Enter value for course: bsc
Enter value for dept: physics
Enter value for sem: 4
Enter value for per: 45.3
1 row created.
SQL> /
Enter value for ro: 104
Enter value for name: seenivasan
Enter value for dob: 19-aug-99
Enter value for course: bsc
Enter value for dept: maths
Enter value for sem: 3
Enter value for per: 98.2
1 row created.
SQL> /
Enter value for ro: 105
Enter value for name: nisanth
Enter value for dob: 25-dec-99
Enter value for course: bsc
Enter value for dept: maths
Enter value for sem: 2
Enter value for per: 69.1
1 row created.
```

B) To select all records

```
SQL> select * from stud;

RNO    NAME      DOB      COURSE   DEPT     SE               PER
------ ---------- --------- -------- -------- -- ----------
101    rishwinth  10-FEB-99 bsc      it       3         75
102    dilip      25-FEB-99 bsc      maths    3         73
103    kishore    15-MAR-98 bsc      physics  4         45
104    seenivasan 19-AUG-99 bsc      maths    3         98
105    nisanth    25-DEC-99 bsc      maths    2         69
```

C) To select rno,name,percentage per student

```
SQL> select rno,name,per from stud;

RNO    NAME           PER
------ ---------- ----------
101    rishwinth         75
102    dilip             73
103    kishore           45
104    seenivasan        98
105    nisanth           69
```

D) To select details of all students with percentage>=75

```
SQL> select * from stud where per>=75;

RNO    NAME       DOB       COURSE   DEPT     SE       PER
------ ---------- --------- -------- -------- -- ------------------ --------
101    rishwinth  10-FEB-99 bsc        it             3         75
104    seenivasan 19-AUG-99 bsc      maths    3         98
```

E) To select rno and name of all records stored in order by percentage

```
SQL> select rno,name from stud order by per;

RNO    NAME
------ ----------
103    kishore
105    nisanth
102    dilip
101    rishwinth
104    seenivasan
```

F) To select rno and name from students in descending order

```
SQL> select rno,name from stud order by per desc;
RNO    NAME
------ ----------
104    seenivasan
101    rishwinth
102    dilip
105    nisanth
103    kishore
```

G) To select name of the students belonging 3rd semester and department='maths'.

```
SQL> Select  name  from stud  where  sem=03 and dept='maths';

NAME
----------
Dilip
seenivasan
```

H) To select all records where name is start with alphabet 'D'.

```
SQL> select * from stud where name like 'd%';
RNO    NAME       DOB       COURSE   DEPT     SE       PER
------ ---------- --------- -------- -------- -- ------------------ --------
102    dilip      25-FEB-99 bsc      maths    3         73
```

EXNO-8 ITEM SALES

Queries:

```
SQL> create table item(itemcode varchar2(5)primary key,name varchar2(20),sellpri
ce number(4),qtyathand number(4));
Table created.

SQL> create table sales(itemcode varchar2(5)references item(itemcode),sdate date, qtysold
number(5));
Table created.

SQL> desc item;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 ITEMCODE                                  NOT NULL VARCHAR2(5)
 NAME                                               VARCHAR2(20)
 SELLPRICE                                          NUMBER(4)
 QTYATHAND                                          NUMBER(4)
```

Insert the records into the table

```
SQL> insert into item values('&itemcode','&name','&sellprice','&qtyathand');
Enter value for itemcode: a01
Enter value for name: mouse
Enter value for sellprice: 100
Enter value for qtyathand: 10
1 row created.
SQL> /
Enter value for itemcode: a02
Enter value for name: keyboard
Enter value for sellprice: 500
Enter value for qtyathand: 5
1 row created.
SQL> /
Enter value for itemcode: a03
Enter value for name: computersystem
Enter value for sellprice: 1000
Enter value for qtyathand: 15
1 row created.
SQL> /
Enter value for itemcode: a04
Enter value for name: gamepad
Enter value for sellprice: 350
```

```
Enter value for qtyathand: 15
1 row created.
SQL> /
Enter value for itemcode: a05
Enter value for name: printer
Enter value for sellprice: 1200
Enter value for qtyathand: 30
1 row created.

SQL> desc sales;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 ITEMCODE                                           VARCHAR2(5)
 SDATE                                              DATE
 QTYSOLD                                            NUMBER(5)


SQL> select *  from item;
ITEMC NAME                 SELLPRICE          QTYATHAND
----- -------------------- ---------- ------------------------------ ---------- ----------
a01   mouse                       100                         10
a02   keyboard                    500                          5
a03   computersystem              1000                        15
a04   gamepad                      350                         15
a05   printer               1200        30

SQL> insert into sales values('&itemcode','&sdate','&qtysold');
Enter value for itemcode: a01
Enter value for sdate: 10-mar-18
Enter value for qtysold: 2
1 row created.
SQL> /
Enter value for itemcode: a02
Enter value for sdate: 30-jun-18
Enter value for qtysold: 3
1 row created.
SQL> /
Enter value for itemcode: a03
Enter value for sdate: 28-sep-17
Enter value for qtysold: 8
1 row created.
SQL> /
Enter value for itemcode: a04
Enter value for sdate: 03-oct-18
Enter value for qtysold: 9
```

```
1 row created.
SQL> /
Enter value for itemcode: a05
Enter value for sdate: 13-nov-17
Enter value for qtysold: 20
1 row created.
```

Select all records

```
SQL> select * from item;

ITEMC NAME                SELLPRICE  QTYATHAND
----- -------------------- ---------- ----------
a01   mouse                    100         10
a02   keyboard                 500          5
a03   system                  1000         15
a04   gamepad                   350         15
a05   printer                  1200         30


SQL> select * from sales;

ITEMC SDATE       QTYSOLD
----- --------- ----------
a01   10-MAR-18          2
a02   30-JUN-18          3
a03   28-SEP-17          8
a04   03-OCT-18          9
a05   13-NOV-17         20
```

A)Change the name of the item from 'system' to 'computer system'.

```
SQL> update item set name='computersystem' where sellprice=1000;
1 row updated.

SQL> select * from  item  where itemcode='a03';
ITEMC NAME                SELLPRICE  QTYATHAND
----- -------------------- ---------- ------------------------------
a03   computersystem            1000         15
```

B)delete all sales records if the name is mouse

```
SQL> delete from sales where itemcode=(select itemcode from item where name='mouse');
1 row deleted.
```

```
SQL> select * from sales;

ITEMC SDATE       QTYSOLD
----- --------- ----------
a02   30-JUN-18         3
a03   28-SEP-17         8
a04   03-OCT-18         9
a05   13-NOV-17        20

SQL> delete from item where itemcode=(select itemcode from item where name='mouse');
1 row deleted.


SQL> select * from item;

ITEMC NAME               SELLPRICE  QTYATHAND
----- ------------------- ---------- ----------
a02   keyboard                500          5
a03   computersystem          1000         15
a04   gamepad                 350         15
a05   printer                 1200         30
```

C) Insert the new table attribute 'tax' to table sales.

```
SQL> alter table sales add tax number(3);
Table altered.

SQL> desc sales;

SQL> select * from sales;
ITEMC SDATE       QTYSOLD       TAX
----- --------- ---------- ----------
a02   30-JUN-18         3
a03   28-SEP-17         8
a04   03-OCT-18         9
a05   13-NOV-17        20
```

D)Fill the text table with the following values 4% of selling price *sold quantity.

```
SQL> update sales set tax=(select 0.04*item.sellprice*sales.qtysold from item where
sales.itemcode=item.itemcode);
4 rows updated.

SQL> select * from sales;
```

```
ITEMC SDATE       QTYSOLD       TAX
----- --------- ---------- ----------
a02   30-JUN-18         3        60
a03   28-SEP-17         8       320
a04   03-OCT-18         9       126
a05   13-NOV-17        20       960
```

E)Delete the records from the both tables if the item have not been sold past 20 days.

```
SQL> delete from sales where itemcode in(select itemcode from sales group by ite
mcode having round(sysdate-max(sdate))>20);
3 rows deleted.

SQL> select * from sales;
ITEMC SDATE       QTYSOLD       TAX
----- --------- ---------- ----------
a04   03-OCT-18         9       126
```

EX NO-9 VEHICLE DETAILS

Queries:

SQL> create table vehicle (vcode number(5),vname varchar2(10),type varchar2(10),company varchar2(10),onroadprice number(8),colour varchar2(8),datepurchased date,model varchar2(5));
Table created.

A)Insert the vehicle records to the table

SQL> insert into vehicle
values('&code','&vname','&type','&company','&roadprice','&colour','&datepurchased','&model');

Enter value for code: 1
Enter value for vname: scorpio
Enter value for type: suv
Enter value for company: mahindra
Enter value for roadprice: 35000
Enter value for colour: blue
Enter value for datepurchased: 13-dec-17
Enter value for model: 2012
1 row created.

SQL> /
Enter value for code: 2
Enter value for vname: omni
Enter value for type: van
Enter value for company: maruthi
Enter value for roadprice: 40000
Enter value for colour: white
Enter value for datepurchased: 17-jun-18
Enter value for model: 2009
1 row created.

SQL> /
Enter value for code: 3.
Enter value for vname: innova
Enter value for type: luxury
Enter value for company: toyota
Enter value for roadprice: 100000
Enter value for colour: silver
Enter value for datepurchased: 26-may-16
Enter value for model: 2011
1 row created.

```
SQL> /
Enter value for code: 4
Enter value for vname: ciaz
Enter value for type: sedan
Enter value for company: honda
Enter value for roadprice: 50000
Enter value for colour: black
Enter value for datepurchased: 04-mar-2015
Enter value for model: 2014
1 row created.

SQL> /
Enter value for code: 5
Enter value for vname: ciaz
Enter value for type: sedan
Enter value for company: honda
Enter value for roadprice: 60000
Enter value for colour: black
Enter value for datepurchased: 04-apr-16
Enter value for model: 2015
1 row created.

SQL> /
Enter value for code: 6
Enter value for vname: car
Enter value for type: sedan
Enter value for company: hyundai
Enter value for roadprice: 75000
Enter value for colour: black
Enter value for datepurchased: 12-oct-2017
Enter value for model: 2013
1 row created.
```

B)List all vehicle details

```
SQL> select * from vehicle;

 CODE VNAME   TYPE COMPANY    ONROADPRICE COLOUR  DATEPURCH MODEL
---------- ---------- ---------- ---------- ----------- -------- --------- ----    ---------- ----------- -----
1 scorpio   suv       mahindra        35000 blue     13-DEC-17 2012
 2 omni      van       maruthi         40000 white    17-JUN-18 2009
 3 innova    luxury    toyota          100000 silver  26-MAY-16 2011
 4 ciaz      sedan     honda           50000 black    04-MAR-15 2014
 5 ciaz      sedan     honda           60000 black    04-APR-16 2015
 6 car       sedan     hyundai         75000 black    12-OCT-17 2013
6 rows selected.
```

C)Create a view on vehicle table.

SQL> create view vehview as select * from vehicle where colour='black' and type='sedan';
View created.

List the details of the table of vehview

SQL> select * from vehview;

CODE	VNAME	TYPE	COMPANY	ONROADPRICE	COLOUR	DATEPURCH	MODEL
4	ciaz	sedan	honda	50000	black	04-MAR-15	2014
5	ciaz	sedan	honda	60000	black	04-APR-16	2015
6	car	sedan	hyundai	75000	black	12-OCT-17	2013

D)Delete the vehicles whichever purchased before the year from the view.

SQL> delete from vehview where current_ date- datepurchased >365;
2 rows deleted.

SQL> select * from vehview;

CODE	VNAME	TYPE	COMPANY	ONROADPRICE	COLOUR	DATEPURCH	MODEL
6	car	sedan	hyundai	75000	black	12-OCT-17	2013

E) Select the records from the view having onroad price between 40,000 and 80,000

SQL> select * from vehview where onroadprice between 40000 and 80000;

CODE	VNAME	TYPE	COMPANY	ONROADPRICE	COLOUR	DATEPURCH	MODEL
6	car	sedan	hyundai	75000	black	12-OCT-17	2013

F)Drop the view

SQL> drop view vehview;
View dropped.

G) Select all the vehicles which are white in colour.

SQL> select * from vehicle where colour='white';

CODE	VNAME	TYPE	COMPANY	ONROADPRICE	COLOUR	DATEPURCH	MODEL
omni	van	maruthi	40000	white	17-JUN-18	2009	

SQL> select * from vehicle;

CODE	VNAME	TYPE	COMPANY	ONROADPRICE	COLOUR	DATEPURCH	MODEL
1	scorpio	suv	mahindra	35000	blue	13-DEC-17	2012
2	omni	van	maruthi	40000	white	17-JUN-18	2009
3	innova	luxury	toyota	100000	silver	26-MAY-16	2011
6	car	sedan	hyundai	75000	black	12-OCT-17	2013

SQL> select * from vehview;

EX NO-10 SUPPLIER DETAILS

Queries:

```
SQL> create table sup(supcode varchar2(3)primary key,name varchar2(10) not null,
gender char(1)check(gender in('m','M','f','F')),type varchar2(6)check(type
in('credit','cash')),address varchar2(50),city varchar2(10),moblie number(10)unique);

Table created.

SQL> create table supcode(supcode varchar2(5)references sup(supcode),itemname va
rchar2(10)not null,price number(3), check(price between 5 and 250),deliveredwithin
number(2));

Table created.

SQL> desc sup;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------
 SUPCODE                                   NOT NULL VARCHAR2(3)
 NAME                                      NOT NULL VARCHAR2(10)
 GENDER                                             CHAR(1)
 TYPE                                               VARCHAR2(6)
 ADDRESS                                            VARCHAR2(50)
 CITY                                               VARCHAR2(10)
 MOBLIE                                             NUMBER(10)
```

A)Insert the records into the table

```
SQL> insert into sup values('&supcode','&name','&gender','&type','&address','&ci
ty','&mobile');

Enter value for supcode: a01
Enter value for name: dilip
Enter value for gender: m
Enter value for type: credit
Enter value for address: 50,athipalayam
Enter value for city: coimbatore
Enter value for mobile: 8973172512
1 row created.

SQL> /
Enter value for supcode: a02
Enter value for name: riswinth
Enter value for gender: m
Enter value for type: cash
```

Enter value for address: 13/5,karamadai
Enter value for city: coimbatore
Enter value for mobile: 8974568574
1 row created.

SQL> /
Enter value for supcode: a03
Enter value for name: kishore
Enter value for gender: m
Enter value for type: credit
Enter value for address: 36,gandhi nagar
Enter value for city: erode
Enter value for mobile: 7896452120
1 row created.

SQL> /
Enter value for supcode: a04
Enter value for name: seenivasan
Enter value for gender: m
Enter value for type: cash
Enter value for address: 10/7,panayampalli
Enter value for city: erode
Enter value for mobile: 7845963547
1 row created.

SQL> /
Enter value for supcode: a05
Enter value for name: sudha
Enter value for gender: f
Enter value for type: credit
Enter value for address: 45/9,anna nagar
Enter value for city: shivaganga
Enter value for mobile: 9875621025
1 row created.

SQL> /
Enter value for supcode: a06
Enter value for name: rosan
Enter value for gender: m
Enter value for type: cash
Enter value for address: 9/2f,east street
Enter value for city: karur
Enter value for mobile: 5698741230
1 row created.

```
SQL> desc supcode;

 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------
 SUPCODE                                            VARCHAR2(5)
 ITEMNAME                                  NOT NULL VARCHAR2(10)
 PRICE                                              NUMBER(3)
 DELIVEREDWITHIN                                    NUMBER(2)
SQL> insert into supcode values('&supcode','&itemname','&price','&deliveredwithin');
Enter value for supcode: a01
Enter value for itemname: ice cream
Enter value for price: 50
Enter value for deliveredwithin: 3
1 row created.

SQL> /
Enter value for supcode: a02
Enter value for itemname: biscuit
Enter value for price: 30
Enter value for deliveredwithin: 4
1 row created.

SQL> /
Enter value for supcode: a03
Enter value for itemname: chocalate
Enter value for price: 120
Enter value for deliveredwithin: 2
1 row created.

SQL> /
Enter value for supcode: a04
Enter value for itemname: cake
Enter value for price: 250
Enter value for deliveredwithin: 3
1 row created.

SQL> /
Enter value for supcode: a05
Enter value for itemname: cookies
Enter value for price: 140
Enter value for deliveredwithin: 2
1 row created.

SQL> /
Enter value for supcode: a06
```

Enter value for itemname: biscuit
Enter value for price: 50
Enter value for deliveredwithin: 1
1 row created.

Select all records

SQL> select * from sup;

```
SUP NAME   G TYPE              ADDRESS                    CITY                    MOBLIE
---------- --------- ---------- - ------ --------------------------------------------------
a01 dilip  m credit      50,athipalayam       coimbatore                  8973172512
a02 riswinth   m cash   13/5,karamadai    Coimbatore            8974568574
a03 kishore    m credit 36,gandhi nagar     erode                  7896452120
a04 seenivasan m cash   10/7,panayampalli     erode                  7845963547
a05 sudha      f credit 45/9,anna nagar      shivaganga                9875621025
a06 rosan      m cash   9/2f,east street        karur                  5698741230
```

6 rows selected.

SQL> select * from supcode;

```
SUPCO ITEMNAME       PRICE DELIVEREDWITHIN
----- ---------- ---------- ------------------------ ---------- ---------------

a01   ice cream         50             3
a02   biscuit          30            4
a04   cake            250            3
a05   cookies          140             2
a06   biscuit          50            1
a03   chocalate        120             2
```

6 rows selected.

B)List all the suppliers name and city who supply 'ice creams'.

SQL> select name,city from sup s1,supcode s2 where s1.supcode=s2.supcode and itemname='ice cream';

```
NAME       CITY
---------- ----------
dilip      coimbatore
```

c)List the suppliers name who supply biscuits with in one day

SQL> select name from sup s1,supcode s2 where s1.supcode=s2.supcode and itemname

='biscuit' and deliveredwithin='1';

NAME
----
rosan

D)List the number of different items along with the supplier name.

SQL> select name from sup s1,supcode s2 where s1.supcode=s2.supcode;

NAME
----
dilip
riswinth
seenivasan
sudha
rosan
kishore

6 rows selected.

E)List the female suppliers who supply for credit but do not supply ‘cake’ and deliveredwithin 2 days.

SQL>select name from sup s1,supcode s2 where s1.supcode=s2.supcode and type='credit' and gender='f ' and itemname!='pepsi' and deliveredwithin='2';

NAME
----
sudha

EX.No. 11 TRIGGER

Create Table:

```
SQL> create table trigger1(rid number(6),distance number(6),fare number(10));
Table created.
```

Insert values to trigger1 Table:

```
SQL> insert into trigger1 values(&rid,&distance,&fare);
Enter value for rid: 001
Enter value for distance: 10
Enter value for fare: 80
old   1: insert into trigger1 values(&rid,&distance,&fare)
new  1: insert into trigger1 values(001,10,80)
1 row created.
SQL> /
Enter value for rid: 10
Enter value for distance: 30
Enter value for fare: 100
old   1: insert into trigger1 values(&rid,&distance,&fare)
new  1: insert into trigger1 values(10,30,100)
1 row created.


SQL> /
Enter value for rid: 11
Enter value for distance: 80
Enter value for fare: 500
old   1: insert into trigger1 values(&rid,&distance,&fare)
new  1: insert into trigger1 values(11,80,500)
1 row created.
```

Display the trigger1 Table:

```
SQL> select * from trigger1;
RID         DISTANCE       FARE
----------  ---------------  ----------
  1            10               80
  10           30               100
  11           80               500
```

Create trigger:

```
SQL> create or replace trigger function
  2  after insert or update or delete on trigger1 for each row
  3  begin
  4  dbms_output.put_line('modification is performed');
  5  end;
  6  /
Trigger created.
```

Update fare values to trigger1 Table:

SQL> update trigger1 set fare=80 where distance=30;
modification is performed
1 row updated.

Delete data from trigger1 Table:

SQL> delete from trigger1 where rid=1;
modification is performed
1 row deleted.

SQL> commit;
Commit complete.

Display the trigger1 Table:

SQL> select * from trigger1;

RID	DISTANCE	FARE
10	30	80
11	80	500

Insert data from trigger1 Table:

SQL> insert into trigger1 values(rid, distance, fare);
modification is performed
1 row created.

SQL> commit;
Commit complete.

Display the trigger1 Table:

SQL> select * from trigger1;

RID	DISTANCE	FARE
10	30	80
11	80	500
12	30	25

EX.No. 12 EXCEPTION HANDLING

Create table:

```
SQL> create table customer(cusid number(6),name varchar(25),address varchar(25));
Table created.
```

Insert values to customer table:

```
SQL> insert into customer values('&cusid','&name','&address');
Enter value for cusid: 1
Enter value for name: vignesh
Enter value for address: mtp
old   1: insert into customer values('&cusid','&name','&address')
new   1: insert into customer values('1','vignesh','mtp')
1 row created.
SQL> /
Enter value for cusid: 2
Enter value for name: manoj
Enter value for address: mtp
old   1: insert into customer values('&cusid','&name','&address')
new   1: insert into customer values('2','manoj','mtp')
1 row created.
```

Display the customer table:

```
SQL> select * from customer;
CUSID       NAME                 ADDRESS
----------  -------------------  ------------------------
    1           vignesh                 mtp
    2           manoj                   mtp
```

PL/SQL program to set Exception handling in customer table:

```
SQL> set serveroutput on
SQL> declare
  2  c_id customer.cusid%type:=&c_id;
  3  c_name customer.name%type;
  4  c_address customer.address%type;
  5  invalid_cid Exception;
  6  begin
  7  if c_id<=0 then
  8  raise invalid_cid;
  9  else
 10  select name,address into c_name,c_address from customer where cusid=c_id;
 11  dbms_output.put_line('name:'||c_name);
 12  dbms_output.put_line('address:'||c_address);
 13  end if;
 14  Exception
 15  when invalid_cid then
 16  dbms_output.put_line('id must be greater than zero');
 17  when no_data_found then
```

```
 18  dbms_output.put_line('no such customer');
 19  end;
 20  /
Enter value for c_id: 22
old   2: c_id customer.cusid%type:=&c_id;
new   2: c_id customer.cusid%type:=22;
no such customer
PL/SQL procedure successfully completed.
SQL> /
Enter value for c_id: 0
old   2: c_id customer.cusid%type:=&c_id;
new   2: c_id customer.cusid%type:=0;
id must be greater than zero
PL/SQL procedure successfully completed.

SQL> /
Enter value for c_id: 1
old   2: c_id customer.cusid%type:=&c_id;
new   2: c_id customer.cusid%type:=1;
name:vignesh
address:mtp
```

****