# **ADBMS LAB**

# **CO1- Prgms**

create table student\_sanchana(rollno integer primary key,name varchar(20),dob date, dept varchar(5),marks float);

A) SQL> insert into student\_sanchana values(1,'Amitha','18-jun-1998','CS',480);

1 row created.

SQL> insert into student\_sanchana values(2,'Arya','12-jul-1989','IT',500);

1 row created.

SQL> insert into student\_sanchana values(3,'George','19-jan-1989','CS',489);

1 row created.

SQL> insert into stud student\_sanchana values(4,'Gouuripriya','28-nov-1989','CS',495);

1 row created.

SQL> insert into student\_sanchana values(5,'Henin','12-dec-1988','IT',525);

1 row created.

SQL> insert into student\_sanchana values(6,'Ishana','25-dec-1988','CS',500);

1 row created.

SQL> insert into student\_sanchana values(7,'Pranav','27-nov-1989','CS',510);

SQL> select \* from student\_sanchana;

| ROLLNO NAME  | DOB        | DEPT | MARKS |
|--------------|------------|------|-------|
|              |            |      |       |
| 1 Amitha     | 18-JUN-98  | CS   | 480   |
| 2 Arya       | 12-JUL-89  | IT   | 500   |
| 3 George     | 19-JAN-89  | CS   | 489   |
| 4 Gourikripa | 28-NOV-89  | CS   | 495   |
| 5 Henin      | 12-DEC-88  | IT   | 525   |
| 6 Ishana     | 25-DEC- 88 | CS   | 500   |
| 7 Pranav     | 27-NOV-89  | CS   | 510   |

7 rows selected.

# B) SQL> alter table student\_sanchana add(address varchar(10));

Table altered.

# SQL> alter table student\_sanchana modify(name varchar(20));

Table altered.

# C) SQL> select \* student\_sanchana;

| ROLLNO NAME  | DOB        | DEPT | MARKS ADDRESS |
|--------------|------------|------|---------------|
| <br>         |            |      |               |
| 1 Amitha     | 18-JUN-98  | CS   | 480           |
| 2 Arya       | 12-JUL-89  | IT   | 500           |
| 3 George     | 19-JAN-89  | CS   | 489           |
| 4 Gourikripa | 28-NOV-89  | CS   | 495           |
| 5 Henin      | 12-DEC-88  | IT   | 525           |
| 6 Ishana     | 25-DEC- 88 | CS   | 500           |
| 7 Pranav     | 27-NOV-89  | CS   | 510           |
|              |            |      |               |

7 rows selected.

### SQL> desc student\_sanchana;

| Name   | Null?    | Type         |
|--------|----------|--------------|
|        |          |              |
| ROLLNO | NOT NULL | NUMBER(38)   |
| NAME   |          | VARCHAR2(20) |
| DOB    |          | DATE         |
|        |          |              |

DEPT VARCHAR2(5)

MARKS FLOAT(126)

ADDRESS VARCHAR2(10)

### D) SQL> alter table student\_sanchana modify(address varchar(30));

Table altered.

SQL> alter table student\_sanchana modify(address varchar(30));

Table altered.

SQL> update student\_sanchana set address='NO:5,Gandhinagar' where rollno=1;

1 row updated.

SQL> update student\_sanchana set address='Flat No:5A,Skyline Aluva' where rollno=2;

1 row updated.

SQL> update student\_sanchana set address='Apple Heights,Padivattom' where rollno=3;

1 row updated.

SQL> update student\_sanchana set address='Green Valley,Cochin' where rollno=7;

1 row updated.

SQL> set linesize 120

# SQL> select \* from student\_sanchana;

| ROLLNO NAME  | DOB        | DEPT | MARK | S ADDRESS                |
|--------------|------------|------|------|--------------------------|
|              |            |      |      |                          |
| 1 Amitha     | 18-JUN-98  | CS   | 480  | NO:5,Gandhinagar         |
| 2 Arya       | 12-JUL-89  | IT   | 500  | Flat No:5A,Skyline Aluva |
| 3 George     | 19-JAN-89  | CS   | 489  | Apple Heights,Padivattom |
| 4 Gourikripa | 28-NOV-89  | CS   | 495  |                          |
| 5 Henin      | 12-DEC-88  | IT   | 525  |                          |
| 6 Ishana     | 25-DEC- 88 | CS   | 500  |                          |
| 7 Pranav     | 27-NOV-89  | CS   | 510  | Green Valley,Cochin      |

E) SQL> select name,dob from student\_sanchana where months\_between(sysdate,dob)/12<22; G) SQL> select name from student\_sanchana where dept= 'CS' and marks>500;

no rows selected.

F) SQL> select \* from student\_sanchana order by marks;

| ROLLNO NAME  | DOB        |    | DEPT | MARKS ADDRESS            |
|--------------|------------|----|------|--------------------------|
| <br>         |            |    |      |                          |
| 1 Amitha     | 18-JUN-98  | CS | 480  | NO:5,Gandhinagar         |
| 3 George     | 19-JAN-89  | CS | 489  | Apple Heights,Padivattom |
| 4 Gourikripa | 28-NOV-89  | CS | 495  |                          |
| 6 Ishana     | 25-DEC- 88 | CS | 500  |                          |
| 2 Arya       | 12-JUL-89  | IT | 500  | Flat No:5A,Skyline Aluva |
| 7 Pranav     | 27-NOV-89  | CS | 510  | Green Valley,Cochin      |
| 5 Henin      | 12-DEC-88  | IT | 525  |                          |
|              |            |    |      |                          |

7 rows selected

| 3) select name from student_sanchana where dept='CS' and marks>500;   |   |
|---|---|
| JAME  |   |
|   |   |
| ravav   |   |
| <ul><li>SQL&gt; select name from student_sanchana where marks&gt;(select avg(marks)from tudent_sanchana);</li></ul> | n |
| NAME  |   |
| <del></del>   |   |
| Arya  |   |
| Ishana  |   |
| Pranav  |   |
|   |   |
| I) drop table student_sanchana;   |   |
| Table dropped   |   |

# CO1-Exp-2

```
SQL> create table emp(emp_id char(8) check(emp_id like 'E%') primary key,emp_name
varchar(18),street_no int,city varchar(18));
Table created.
SQL> insert into emp values('E-101','Adarsh',101,'MG Road');
1 row created.
SQL> insert into emp values('E-102','Bonny',101,'MG Road');
1 row created.
SQL> insert into emp values('E-103','Catherin',102,'Cochin');
1 row created.
SQL> insert into emp values('E-104','Glenn',104,'Ernakulam');
1 row created.
SQL> insert into emp values('E-105','Dinu',103,'PMNA');
1 row created.
SQL> insert into emp values('E-106','Anu',104,'Eranakulam');
1 row created.
SQL> insert into emp values('E-107','Ammu',105,'Malappuram');
1 row created.
SQL> insert into emp values('E-108','Banu',101,'MG Road');
1 row created.
SQL> insert into emp values('E-109','Lehen',102,'Cochin');
1 row created.
SQL> insert into emp values('E-110','Zayan',106,'Pattambi');
1 row created.
SQL> insert into emp values('E-111','Rahul',107,'Calicut');
```

### SQL> select \* from emp;

| EMP_I | D EMP_NAME | STREET_N | O CITY     |
|-------|------------|----------|------------|
|       |            |          |            |
| E-101 | Adarsh     | 101      | MG Road    |
| E-102 | Bonny      | 101      | MG Road    |
| E-103 | Catherin   | 102      | Cochin     |
| E-104 | Glenn      | 104      | Ernakulam  |
| E-105 | Dinu       | 103      | PMNA       |
| E-106 | Anu        | 104      | Eranakulam |
| E-107 | Ammu       | 105      | Malappuram |
| E-108 | Banu       | 101      | MG Road    |
| E-109 | Lehen      | 102      | Cochin     |
| E-110 | Zayan      | 106      | Pattambi   |
| E-111 | Rahul      | 107      | Calicut    |

SQL> create table company(company\_name varchar(18) primary key,city varchar(18));

Table created.

SQL> insert into company values('SBI','MG Road');

1 row created.

SQL> insert into company values('SBT','MG Road');

1 row created.

SQL> insert into company values('Federal','Broadway');

1 row created.

SQL> insert into company values('Indian Bank','Cochin');

```
1 row created.
SQL> insert into company values('SIB','Ernakulam');
1 row created.
SQL> select * from company;
COMPANY_NAME CITY
-----
                   MG Road
SBI
SBT
                  MG Road
Federal
                   Broadway
Indian Bank
                   Cochin
SIB
                   Ernakulam
SQL> create table works(emp_id char(8) references emp(emp_id),company_name
                                company(company_name),salary
varchar(18)
                references
                                                                     float,primary
key(emp_id,company_name));
Table created.
SQL> insert into works values('E-101','SBI',71000);
1 row created.
SQL> insert into works values('E-102','SBI',90000);
1 row created.
SQL> insert into works values('E-103','SBT',40000);
1 row created.
SQL> insert into works values('E-104','Federal',37000);
1 row created.
```

### SQL>insert into works values('E-105','SBT',17000)

1 row created.

### SQL> select \* from works;

| EMP_ID | COMPANY_NAME | SALARY |
|--------|--------------|--------|
|        |              |        |
| E-101  | SBI          | 71000  |
| E-102  | SBI          | 90000  |
| E-103  | SBT          | 40000  |
| E-104  | Federal      | 37000  |
| E-105  | SB1          | 17000  |

SQL> create table manages(emp\_id char(8) references emp(emp\_id),manager\_id char(8) references emp(emp\_id),unique(emp\_id,manager\_id));

Table created.

SQL> insert into manages values('E-101','E-102');

1 row created.

SQL> insert into manages values('E-102',NULL);

1 row created.

SQL> insert into manages values('E-103','E-110');

1 row created.

SQL> insert into manages values('E-104','E-111');

1 row created.

SQL> insert into manages values('E-105','E-110');

# SQL> select \* from manages;

| EMP_ID | MANAGER_ |
|--------|----------|
|        |          |
| E-101  | E-102    |
| E-102  |          |
| E-103  | E-110    |
| E-104  | E-111    |
| E-105  | E-110    |

A) SQL> select emp\_name from works,emp where company\_name='SBI' and emp.emp\_id=works.emp\_id;

EMP\_NAME
----Adarsh
Bonny

B) SQL> select emp.emp\_name from emp,works,company where emp.emp\_id=works.emp\_id and works.company\_name=company.company\_name and emp.city=company.city;

EMP\_NAME
-----Adarsh
Bonny

C) SQL> select emp\_id from works w1,(select avg(salary) as avgsal,company\_name from works group by company\_name) w2 where w1.company\_name=w2.company\_name and w1.salary>w2.avgsal;

EMP\_ID -----E-102 D) SQL> update works set salary=salary\*1.1 where emp\_id in (select manager\_id from manages) and company\_name='SBI';

1 row updated.

### SQL> select \* from works;

| EMP_ID | COMPANY_N | AME SALARY |
|--------|-----------|------------|
| E-101  | <br>SBI   | 71000      |
| E-102  | SBI       | 108900     |
| E-103  | SBT       | 40000      |
| E-104  | Federal   | 37000      |
| E-105  | SB1       | 17000      |

E) SQL> select company\_name from works group by company\_name having count(emp\_id)>=all(select count(emp\_id)from works group by company\_name);

COMPANY\_NAME
-----SBI

### SQL> select \* from works;

| EMP_I | D COMPAN | NY_NAME | SALARY |
|-------|----------|---------|--------|
|       |          |         |        |
| E-101 | SBI      | 71000   |        |
| E-102 | SBI      | 108900  |        |
| E-103 | SBT      | 40000   |        |
| E-104 | Federal  | 37000   |        |

F) SQL> select company\_name from works group by company\_name having avg (salary)>(select avg(salary) from works group by company\_name having company\_name='SBT'); COMPANY NAME SBI **SQL>** commit; Commit complete. CO1-Exp-3 SQL> create table customer(id integer primary key,name varchar(20),age char(20),address varchar(20),salary float); Table created. SQL> insert into customer values(1,'Ramesh',32,'Ahmedabad',2000.00); 1 row created. SQL> insert into customer values(2, 'Khilan', 25, 'Dhelhi', 1500.00); 1 row created. SQL> insert into customer values(3,'Kaushik',23,'Kota',2000.00); 1 row created. SQL> insert into customer values(4,'Chaitali',25,'Mumbai',6500.00); 1 row created. SQL> insert into customer values(5,'Hardik',27,'Bhopal',8500.00); 1 row created. SQL> insert into customer values(6,'Komal',22,'MP',4500.00);

#### SQL> insert into customer values(7,'Muffy',24,'Indore',10000.00);

1 row created.

**SQL> set linesize 120** 

**SQL>** select \* from customer;

| ID NAME    | AGE | ADDRESS   | SALARY |
|------------|-----|-----------|--------|
| 1 Ramesh   | 32  | Ahmedabad | 2000   |
| 2 Khilan   | 25  | Dhelhi    | 1500   |
| 3 Kaushik  | 23  | Kota      | 2000   |
| 4 Chaitali | 25  | Mumbai    | 6500   |
| 5 Hardik   | 27  | Bhopal    | 8500   |
| 6 Komal    | 22  | MP        | 4500   |
| 7 Muffy    | 24  | Indore    | 10000  |

7 rows selected.

SQL> create table orders(oid integer,dates varchar(15),customer\_id integer,amount integer);

Table created.

SQL> insert into orders values(102,'2009-10-08',3,3000);

1 row created.

SQL> insert into orders values(100,'2009-10-08',3,1500);

1 row created.

**SQL> insert into orders values(101,'2009-11-20',2,1560);** 

# SQL> insert into orders values(103,'2008-05-20',4,2060);

# SQL> select \* from orders;

| OID   | DATES      | CUSTOMER_ID |   | AMOUNT |  |
|-------|------------|-------------|---|--------|--|
|       |            |             |   |        |  |
| 102   | 2009-10-08 |             | 3 | 3000   |  |
| 100 2 | 2009-10-08 |             | 3 | 1500   |  |
| 101   | 2009-11-20 |             | 2 | 1560   |  |
| 103   | 2008-05-20 |             | 4 | 2060   |  |

### **SQL>** commit;

Commit complete.

# A) SQL> select id,name,amount,dates from customer inner join orders on customer.id = orders.customer\_id;

| ID NAME    | AMOUNT DATES    |  |  |
|------------|-----------------|--|--|
|            |                 |  |  |
| 2 Khilan   | 1560 2009-11-20 |  |  |
| 3 Kaushik  | 1500 2009-10-08 |  |  |
| 3 Kaushik  | 3000 2009-10-08 |  |  |
| 4 Chaitali | 2060 2008-05-20 |  |  |

# B) SQL> select id,name,amount,dates from customer left join orders on customer.id = orders.customer\_id;

| ID NAME          | AMOUNT DATES    |  |  |
|------------------|-----------------|--|--|
|                  |                 |  |  |
| 3 Kaushik        | 3000 2009-10-08 |  |  |
| 3 Kaushik        | 1500 2009-10-08 |  |  |
| 2 Khilan         | 1560 2009-11-20 |  |  |
| 4 Chaitali       | 2060 2008-05-20 |  |  |
| 5 Hardik         |                 |  |  |
| 1 Ramesh         |                 |  |  |
| 6 Komal          |                 |  |  |
| 7 Muffy          |                 |  |  |
| 8 rows selected. |                 |  |  |

# C) SQL> select id,name,amount,dates from customer right join orders on customer.id = orders.customer\_id;

| ID NAME    | AMOUNT | DATES      |
|------------|--------|------------|
|            |        |            |
| 2 Khilan   | 1560   | 2009-11-20 |
| 3 Kaushik  | 1500   | 2009-10-08 |
| 3 Kaushik  | 3000   | 2009-10-08 |
| 4 Chaitali | 2060   | 2008-05-20 |

# D) SQL> select id,name,amount,dates from customer full join orders on customer.id = orders.customer\_id;

| ID NAME    | AMOUNT | DATES      |
|------------|--------|------------|
|            |        |            |
| 1 Ramesh   |        |            |
| 2 Khilan   | 1560   | 2009-11-20 |
| 3 Kaushik  | 1500   | 2009-10-08 |
| 3 Kaushik  | 3000   | 2009-10-08 |
| 4 Chaitali | 2060   | 2008-05-20 |
| 5 Hardik   |        |            |
| 6 Komal    |        |            |
| 7 Muffy    |        |            |

# CO1-Exp-4

SQL> create table Emply(name varchar2(10),da number(10),hra number(10),ta number(10),salary number(10));

Table created.

SQL> insert into Emply values('&name','&da','&hra','&ta','&salary');

Enter value for name: Allu

Enter value for da: 1000

Enter value for hra: 2000

Enter value for ta: 1000

Enter value for salary: 15000

old 1: insert into Emply values('&name','&da','&hra','&ta','&salary')

new 1: insert into Emply values('Allu','1000','2000','1000','15000')

### SQL> insert into Emply values('&name','&da','&hra','&ta','&salary');

Enter value for name: Akhil

Enter value for da: 1000

Enter value for hra: 3000

Enter value for ta: 15000

Enter value for salary: 20000

old 1: insert into Emply values('&name','&da','&hra','&ta','&salary')

new 1: insert into Emply values('Akhil','1000','3000','15000','20000')

1 row created.

### SQL> insert into Emply values('&name','&da','&hra','&ta','&salary');

Enter value for name: Babu

Enter value for da: 500

Enter value for hra: 2000

Enter value for ta: 500

Enter value for salary: 90000

old 1: insert into Emply values('&name','&da','&hra','&ta','&salary')

new 1: insert into Emply values('Babu','500','2000','500','90000')

1 row created.

#### SQL> insert into Emply values('&name','&da','&hra','&ta','&salary');

Enter value for name: Shella

Enter value for da: 900

Enter value for hra: 2500

Enter value for ta: 1000

Enter value for salary: 11000

old 1: insert into Emply values('&name','&da','&hra','&ta','&salary')

new 1: insert into Emply values('Shella','900','2500','1000','11000')

1 row created.

### SQL> insert into Emply values('&name','&da','&hra','&ta','&salary');

Enter value for name: Zebha

Enter value for da: 1500

Enter value for hra: 1000

Enter value for ta: 2000

Enter value for salary: 100000

old 1: insert into Emply values('&name','&da','&hra','&ta','&salary')

new 1: insert into Emply values('Zebha','1500','1000','2000','100000')

1 row created.

#### **SQL> select \* from Emply;**

| NAME   | DA   | HRA  | TA    | SALARY |
|--------|------|------|-------|--------|
|        |      |      |       |        |
| Allu   | 1000 | 2000 | 1000  | 15000  |
| Akhil  | 1000 | 3000 | 15000 | 20000  |
| Babu   | 500  | 2000 | 500   | 90000  |
| Shella | 900  | 2500 | 1000  | 11000  |
| Zebha  | 1500 | 1000 | 2000  | 100000 |

# A) SQL> create view Emplyview as select name, salary from Emply where salary >10000;

View created.

# SQL> select \* from Emplyview;

| NAME   | SALARY |  |  |
|--------|--------|--|--|
|        |        |  |  |
| Allu   | 15000  |  |  |
| Akhil  | 20000  |  |  |
| Babu   | 90000  |  |  |
| Shella | 11000  |  |  |
| Zebha  | 100000 |  |  |

# B) SQL> update Emply set salary = 25000;

5 rows updated.

### **SQL> select \* from Emply;**

| NAME   | DA   | HRA  | TA    | SALARY |
|--------|------|------|-------|--------|
|        |      |      |       |        |
| Allu   | 1000 | 2000 | 1000  | 25000  |
| Akhil  | 1000 | 3000 | 15000 | 25000  |
| Babu   | 500  | 2000 | 500   | 25000  |
| Shella | 900  | 2500 | 1000  | 25000  |
| Zebha  | 1500 | 1000 | 2000  | 25000  |

### SQL> select \* from Emplyview;

NAME SALARY
-----Allu 25000
Akhil 25000
Babu 25000
Shella 25000

Zebha 25000

### C) SQL> update Emplyview set salary = 1000;

5 rows updated.

# SQL> select \* from Emplyview;

no rows selected

### **SQL> select \* from Emply;**

| NAME   | DA   | HRA  | TA    | SALARY |
|--------|------|------|-------|--------|
|        |      |      |       |        |
| Allu   | 1000 | 2000 | 1000  | 1000   |
| Akhil  | 1000 | 3000 | 15000 | 1000   |
| Babu   | 500  | 2000 | 500   | 1000   |
| Shella | 900  | 2500 | 1000  | 1000   |
| Zebha  | 1500 | 1000 | 2000  | 1000   |