EXPERIMENT 7

DQL COMMANDS (COLLEGE SCHEMA)

Aim:

- Display student id and marks from the student table.
- Display faculty id and name from the faculty table.
- Display who got grade A.
- Display whose marks are less than 50.
- Display the female students whose marks are between 50 to 60.
- Delete the failed students.
- Display activity id and name using object.
- Display student id, faculty id using course name condition with object.
- Select department name starting from ‘c’ and faculty name ending with ‘ ’.
- Select activity having characters between ‘ck’.
- Group by faculty id and display.
- Display the students list whose grade is A using having.
- Display the faculty list who are teaching PPS.
- Apply aggregate functions in student marks - max, min, sum, count, avg.

SCHEMA:

```
1  CREATE SCHEMA college20502;
2  create table student(std_id integer,stud_name varchar(20),gender varchar(10),
3  alter table student add(std_id integer);
4  alter table student add(primary key(std_id));
5  alter table student add(address varchar(20));
6  alter table student modify stud_name varchar(50);
7  insert into student values (1,'rani','F','DBMS',95,'o','Hyderabad');
8  insert into student values (2,'rajesh','M','DBMS',85,'A+','Delhi');
9  insert into student values (3,'priya','F','DBMS',55,'o','Goa');
10 insert into student values (4,'komal','M','DBMS',60,'B+','Gujarath');
11 insert into student values (5,'indu','F','DBMS',89,'o','Mumbai');
12 select *from student;
13 select *from student where marks < 50;
14 select std_id,marks from student;
15 select std_id,stud_name from student where 50 < marks < 60 and gender = "F";
16 update student
17 set marks = 50 where std_id = 4;
18 update student
```

```sql
update student
set std_name = 'Raju' where std_id = 3;
select *from student order by std_id  desc;
select *from student order by grade;
select std_name from student group by grade;
select std_name from student group by grade having grade =
select min(marks) from student;
select max(marks) from student;
select sum(marks) from student;
select avg(marks) from student;

select *from student;
create table faculty(fac_id integer, fac_name varchar(20),
alter table faculty drop mentor_details;
alter table faculty drop total_mentor_details;
alter table faculty add(total_mentor_detail varchar(20));
alter table faculty add(primary key(fac_id));

insert into faculty values (1,'renu', 'JAVA', '90', 'Hyderabad');
insert into faculty values (2,'priya', 'DS', '70', 'kurnool');
insert into faculty values (3,'raghu', 'DM', '65', 'ooty');
insert into faculty values (4,'laxmi', 'DBMS', '50', 'gujarath');
insert into faculty values (5,'varun', 'DS', '80', 'punjab');
select *from faculty;
select fac_id, fac_name from faculty;
select *from faculty where fac_name like" ";
select *from faculty order by fac_name asc;
select *from faculty group by fac_id;
select fac_name from faculty group by course having course = "DBMs";

create table department(dept_no integer, dept_name varchar(20), section varcha
alter table department add(no_of_students_wise integer);
alter table department add(primary key(dep_no));
insert into department values(1,'CSE', 'A', 65, '90', '60');
insert into department values(2,'ECE', 'A', 65, '45', '80');
insert into department values(3,'EEE', 'A', 80, '80', '75');
```

```
54  insert into department values(4,'IT', 'A', 70, '50', '65');
55  select *from department;
56  update department
57  set section = 'B' where  dept_no < 4;
58  delete from department where dept_no = 3;
59  select *from department  where dept_name like "C%";
60  select *from department;
61
62  create table activity (act_id integer, act_name varchar(20), no_of_student integer
63  alter table activity add(faculty varchar(20));
64  alter table activity drop faculty_name;
65  alter table activity modify act_name varchar(50);
66  alter table actvity add(primary key(act_id));
67  insert into activity values(1,'wise', 300,'college','indira');
68  insert into activity values(2,'badminton', 50,'sports','rajesh');
69  insert into activity values(3,'events', 30,'hackathon','lakshmi');
70  insert into activity values(4,'carroms', 400,'sports','raju');
71  insert into activity values(5,'sleep', 30,'leave','kalyani');
72  select *from activity;
73  update activity
74  set act_name = 'sleep' where act_id < 6 and act_id > 4;
75  select *from activity where act_name like "C" and "s";
76  select *from faculty;
```

OUTPUT:

Result Grid | Filter Rows: | Export: | Wrap Ce

std_id	stud_name	gender	subject	marks	grade	address
1	rani	F	DBMS	95	o	Hyderabad
2	rajesh	M	DBMS	85	A+	Delhi
3	priya	F	DBMS	55	o	Goa
4	komal	M	DBMS	60	B+	Gujarath
5	indu	F	DBMS	89	o	Mumbai

Result Grid

std_id	marks
1	95
2	85
3	55
4	60
5	89

Result Grid | Filter

std_id	stud_name
1	rani
3	priya
5	indu

Result Grid | Filter Rows: | Export: | Wrap Cell C

std_id	stud_name	gender	subject	marks	grade	address
5	indu	F	DBMS	89	o	Mumbai
4	komal	M	DBMS	60	B+	Gujarath
3	priya	F	DBMS	55	o	Goa
2	rajesh	M	DBMS	85	A+	Delhi
1	rani	F	DBMS	95	o	Hyderabad

Result Grid

min(marks)
55

Result Grid

min(marks)
55

Result Grid

sum(marks)
384

Result Grid

avg(marks)
76.8000

Result Grid | Filter Rows: | Edit:

fac_id	fac_name	course	pass_percentage	total_mentor_detail
1	renu	JAVA	90	Hyderabad
2	priya	DS	70	kurnool
3	raghu	DM	65	ooty
4	laxmi	DBMS	50	gujarath
5	varun	DS	80	punjab
NULL	NULL	NULL	NULL	NULL

Result Grid | Filt

fac_id	fac_name
1	renu
2	priya
3	raghu
4	laxmi
5	varun
NULL	NULL

Result Grid

fac_name
laxmi

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

dept_no	dept_name	section	no_of_students	pass_percentage	no_of_students_wise
1	CSE	A	65	90	60
2	ECE	A	65	45	80
3	EEE	A	80	80	75
4	IT	A	70	50	65

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

dept_no	dept_name	section	no_of_students	pass_percentage	no_of_students_wise
1	CSE	A	65	90	60

Result Grid | Filter Rows: | Export:

act_id	act_name	no_of_student	category_of_act	faculty
1	wise	300	college	indira
2	badminton	50	sports	rajesh
3	events	30	hackathon	lakshmi
4	carroms	400	sports	raju
5	sleep	30	leave	kalyani

Result Grid | Filter Rows: | Edit:

fac_id	fac_name	course	pass_percentage	total_mentor_detail
1	renu	JAVA	90	Hyderabad
2	priya	DS	70	kurnool
3	raghu	DM	65	ooty
4	laxmi	DBMS	50	gujarath
5	varun	DS	80	punjab
NULL	NULL	NULL	NULL	NULL

Components:

Instance: It is the collection of information stored in a database at a particular moment.

Entity: Object that is relevant to given system. Represented as rectangle.

Attribute: Trait of an entity, relationship or other attribute.

Represented by oval.

Primary Key: A primary key is a column or a set of columns in a

table whose values uniquely identify a row in the table