

EXPERIMENT – 7

DQL COMMANDS (COLLEGE SCHEMA)

AIM:

- Display student id and marks from the 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.
- Display 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 student list whose grade is A using having.
- Display the faculty list whose are teaching PPS.
- Apply aggregate functions in student marks-max,min,sum,count,avg.

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

Schema:

```
1 • CREATE SCHEMA college19537;
2 • create table student(std_id integer,
3     stud_name varchar(20),
4     gender varchar(10),
5     subject varchar(20),
6     marks integer,
7     grade varchar(10));
8 • alter table student add(std_id integer);
9 • alter table student add(primary key(std_id));
10 • alter table student add(address varchar(20));
11 • alter table student modify stdname varchar(50);
12 • insert into student values (1,'latha','F','DBMS',95,'o','Hyderabad');
13 • insert into student values (2,'Ramu','M','DBMS',85,'A+','Vizag');
14 • insert into student values (3,'laxmi','F','DBMS',50,'o','Hyderabad');
15 • insert into student values (4,'laya','F','DBMS',95,'o','Vizag');
16 • insert into student values (5,'Varun','M','DBMS',93,'o','Varanasi');
17 • select * from student;
18 • select *from student where marks < 50;
19 • select std_id,marks from student;
20 • select std_id,std_name from student where 50<marks<60 and gender = 'F';
21 • update student
22     set marks = 50 where std id = 4;
```

```
insert into student values (4,'laya','F','DBMS',95,'o','Vizag');
insert into student values (5,'Varun','M','DBMS',93,'o','Varanasi');
select * from student;
select *from student where marks < 50;
select std_id,marks from student;
select std_id,std_name from student where 50<marks<60 and gender = 'F';
update student
set marks = 50 where std_id = 4;
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 = 'A+';
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), course varchar(10), pass_percentage float);
- 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,'latha','DBMS','80','Hyderabad');
- insert into faculty values (2,'Ramu','OS','90','Vizag');
- insert into faculty values (3,'laxmi','OS','85','Hyderabad');
- insert into faculty values (4,'laya','DBMS','92','Vizag');
- insert into faculty values (5,'Varun','OS','90','Varnasi');
- 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 varchar(1),no_of_students integer,pass_percentage float);
- alter table department add(no_of_stu_wise integer);
- alter table department add(primary key(dept_no));
- insert into department values (1,'CSE','A',70,'80',60);
- insert into department values (2,'IT','A',70,'75',55);
- insert into department values (3,'ECE','A',65,'70',58);
- insert into department values (4,'EEE','A',60,'76',50);
- select *from department;
- update department
set section = 'B' where dept_no < 4;
- delete from department where dept_no = 3;
- select *from department where dept_name like "C%";
- select *from department;

- `create table activity(act_id integer, act_name varchar(20),no_of_students integer,category_of_act varchar(10));`
- `alter table activity add(faculty varchar(20));`
- `alter table activity drop faculty_name;`
- `alter table activity modify act_name varchar(50);`
- `alter table activity add(primary key(act_id));`
- `insert into activity values (1,'wise',300,'college','Chandra');`
- `insert into activity values (2,'football',30,'sports','lakshmi');`
- `insert into activity values (3,'Event',50,'hakothon','raju');`
- `insert into activity values (4,'Chess',300,'sports','varun');`
- `insert into activity values (5,'sleep',300,'leave','latha');`
- `select *from activity;`
- `update activity`
`set act_name = 'sleep' where act_id < 6 and act_id > 4;`
- `select *from activity where act_name like "C" and "s";`
- `select *from activity;`

Outputs:

	std_id	marks
	1	95
	2	85
	3	90
	4	95
	5	93
	NULL	NULL

result Grid				
Filter Rows:				
act_id	act_name	no_of_students_opted	category_of_act	faculty
1	wise	300	college	Chandra
2	football	30	sports	lakshmi
3	Event	50	hakothon	raju
4	Chess	300	sports	varun
5	sleep	300	leave	latha
NULL	NULL	NULL	NULL	NULL

Result Grid						
Filter Rows:						
	dept_no	dept_name	section	no_of_students	pass_percentage	no_of_stu_wise
▶	1	CSE	B	70	80	60
	2	IT	B	70	75	55
	3	ECE	B	65	70	58
	4	EEE	A	60	76	50
*	NULL	NULL	NULL	NULL	NULL	NULL

dept_no	dept_name	section	no_of_students	pass_percentage	no_of_stu_wise
1	CSE	B	70	80	60
2	IT	B	70	75	55
4	EEE	A	60	76	50
NULL	NULL	NULL	NULL	NULL	NULL



	std_name	act_name
▶	Varun	wise
	laya	wise
	Raju	wise
	Ramu	wise
	Varun	wise
	Varun	football
	laya	football
	Raju	football
	Ramu	football
	Varun	football
	Varun	Event
	laya	Event
	Raju	Event
	Ramu	Event
	Varun	Event
	Varun	Chess
	laya	Chess
	Raju	Chess
	Ramu	Chess
	Varun	Chess
	Varun	sleep
	laya	sleep
	Raju	sleep
	Ramu	sleep
	Varun	sleep

std_name	marks	fac_name
Varun	93	latha
laya	50	latha
Raju	90	latha
Ramu	85	latha
Varun	95	latha
Varun	93	Ramu
laya	50	Ramu
Raju	90	Ramu
Ramu	85	Ramu
Varun	95	Ramu
Varun	93	laxmi
laya	50	laxmi
Raju	90	laxmi
Ramu	85	laxmi
Varun	95	laxmi
Varun	93	laya
laya	50	laya
Raju	90	laya
Ramu	85	laya
Varun	95	laya
Varun	93	Varun
laya	50	Varun
Raju	90	Varun



Result Grid						
	dept_no	dept_name	section	no_of_students	pass_percentage	no_of_stu_wise
▶	1	CSE	B	70	80	60
*	NULL	NULL	NULL	NULL	NULL	NULL



fac_id	fac_name	course	pass_percentage	total_mentor_detail
*	NULL	NULL	NULL	NULL

Result Grid	
	std_name
▶	Varun
	Ramu



Result Grid			Filter Rows:	<input type="text"/>
fac_id	fac_name	course	pass_percentage	
1	latha	DBMS	80	
2	Ramu	DS	90	
3	laxmi	DS	85	
4	laya	DBMS	92	
5	Varun	OS	90	
NULL	NULL	NULL	NULL	

Result Grid	
	fac_name
▶	latha

Result Grid			 Filter Rows
	avg(marks)		
▶	82.6000		

Result Grid			 Filter Rows
	max(marks)		
▶	95		

	min(marks)		
	50		

Result Grid			 Filter
	sum(marks)		
▶	413		



Result Grid		Filter Rows:	<input type="text"/>	Export:		Wrap C
	Field	Type	Null	Key	Default	Extra
▶	std_id	int	YES		NULL	
	std_name	varchar(20)	YES		NULL	
	dept	varchar(20)	YES		NULL	

Result 2 ×

Output:

Result Grid			Filter Rows:	<input type="text"/>
	std_id	std_name	dept	

Result Grid			Filter Rows:	<input type="text"/>
	std_id	std_name	dept	
▶	537	Laya	CSE	
	504	Nithya	CSE	
	556	varshitha	CSE	

Result Grid   Filter Rows: | Export

	std_id	std_name	dept
▶	537	Laya	CSE

	std_id	std_name	dept
▶	501	Sudeepya	CSE

