Day-3 Assignment

1) create a student table with the following details (Assume your own datatypes for the data.

USE pl_sql_ex;

Create table students (stu_id int(4) NOT NULL PRIMARY KEY, Stu_name varchar(30) NOT NULL, gender varchar(20) NOT NULL,
Tot_marks int(6) NOT NULL);

desc students;

Field	Type	Null	Key	Default	Extra
stu_id	int	NO	PRI	NULL	
Stu_name	varchar(30)	NO		NULL	
gender	varchar(20)	NO		NULL	
Tot_marks	int	NO		NULL	

insert into students values (10,"Anu","Female",553),
(20,"Anbu","Male",345),
(30,"Malini","Female",567),
(40,"Sankar","Male",590),
(50,"varshan","Male",587);

select * from students;

stu_id	Stu_name	gender	Tot_marks
20	Anbu	Male	345
30	Malini	Female	567
40	Sankar	Male	590
50	varshan	Male	587
NULL	NULL	NULL	NULL

(a) Select the maximum marks of a student in the table

SELECT stu_id,Stu_name, max(Tot_marks) as maxmarks FROM students;

stu_id	Stu_name	maxmarks
10	Anu	590

(b) Select the number of male and female students in the table.

select gender, count(gender) from students group by gender;

gender	count(gender)
Female	2
Male	3

(c)Select the average marks scored by male and female group of students in the table

select gender, avg(Tot_marks) avgmark FROM students group by gender;

	gender	avgmark
	Female	560.0000
	Male	507.3333

(d) select all students who scored marks greater than the average mark of the students in the table

select avg(Tot_marks) from students;

select * from students where Tot_marks > (select avg(Tot_marks) from students);

	stu_id	Stu_name	gender	Tot_marks
▶	10	Anu	Female	553
	30	Malini	Female	567
	40	Sankar	Male	590
	50	varshan	Male	587
*	NULL	NULL	NULL	NULL

(e) Select the group of students who scored greater average marks than the average marks of the entire students in the table

SELECT Stu_name,avg(Tot_marks) FROM students where Tot_marks group by Stu_name > (select avg(Tot_marks) from students);

	Stu_name	avg(Tot_marks)
▶	Anu	538.4444

2)

(a) select all student details whose name value consists of exactly three characters?

select Stu_name from students where Stu_name =(select Stu_name from students where Stu_name like '___');

	Stu_name
▶	Anu

(b) Display all students in ascending order of their gender and descending order of their marks?

select * from students order by gender asc, Tot_marks desc;

stu_id	Stu_name	gender	Tot_marks
80	arya	Female	553
60	vaishu	Female	545
40	Sankar	Male	590
50	varshan	Male	587
90	siddath	Male	548
20	Anbu	Male	345
NULL	NULL	NULL	NULL

3) Find the difference in marks between maximum and minimum in the class?

SELECT MAX(Tot_marks) - MIN(Tot_marks) DIFFERENCE FROM students;

DIFFERENCE
245

4) Create a view object for student table with name ‘mystudtab’ by assuming your own condition for the selection and demonstrate the role of ‘with check option’ for the created view?

create or replace view mystudtab as select * from students where Tot_marks >= 400 with check option;

insert into mystudtab values (60,"vaishu","Female",545);

insert into mystudtab values (70,"vaishukg","Female",345);

select * from mystudtab;

5)

```
START TRANSACTION;
SELECT * FROM students;
SET sql_safe_updates=0;
insert into students values (80,"arya","Female",553);
insert into students values (90,"siddath","Male",548);
insert into students values (100,"priya","Female",558);
SAVEPOINT s1;
DELETE FROM students WHERE stu_id>60;
SELECT * FROM students;
ROLLBACK TO SAVEPOINT s1;
COMMIT;
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6)

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DELIMITER /
create procedure get_math(in n1 int, in n2 int, out square int, out cubee int)
begin
set square= (n1*n1);
set cubee= (n2*n2*n2);
end/

call get_math(10,3,@a,@b);
select @a;
select @b;
```