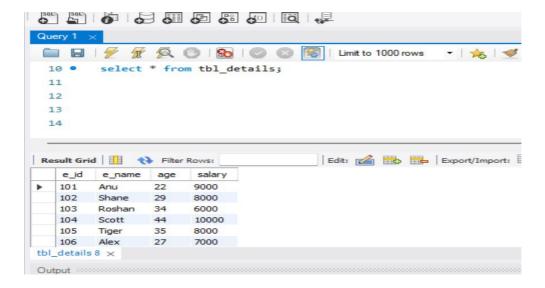# LAB ASSIGNMENT

DATABASE LAB
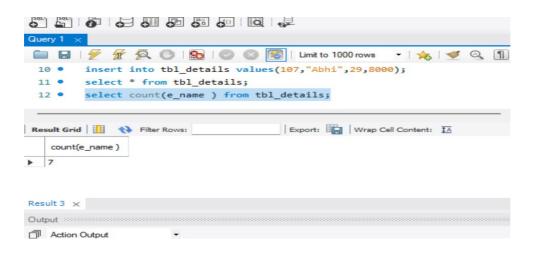
TKM COLLEGE OF ENGINEERING

NAME: HAMNA K A

ROLL NO:222

MANDATORY ASSIGNMENT

CREATE database db_aggemp;

use db_aggemp;

CREATE table tbl_details

(e_id int(10)primary key,

e_name varchar(15) not null,

age int(3),

salary float(15));

insert into tbl_details values(101,"Anu",22,9000);

insert into tbl_details values(102,"Shane",29,8000);

insert into tbl_details values(103,"Roshan",34,6000);

insert into tbl_details values(104,"Scott",44,10000);

insert into tbl_details values(105,"Tiger",35,8000);

insert into tbl_details values(106,"Alex",27,7000);

insert into tbl_details values(107,"Abhi",29,8000);

1.select * from tbl_details;

```
10 •    select * from tbl_details;
11
12
13
14
```

e_id	e_name	age	salary
101	Anu	22	9000
102	Shane	29	8000
103	Roshan	34	6000
104	Scott	44	10000
105	Tiger	35	8000
106	Alex	27	7000

tbl_details 8 ✕

2. select count(e_name) from tbl_details;


```
10 •    insert into tbl_details values(107,"Abhi",29,8000);
11 •    select * from tbl_details;
12 •    select count(e_name ) from tbl_details;
```

count(e_name)
7

Result 3 ✕

3. select max(age) from tbl_details;


```
11 •    select * from tbl_details;
12 •    select count(e_name ) from tbl_details;
13 •    select e_name,max(age) from tbl_details;
```

e_name	max(age)
Anu	44

Result 4 ✕

4. select min(age) from tbl_details;

File Edit View Query Database Server Tools Scripting Help

Query 1 ×

Limit to 1000 rows

```
1 •   use   db_aggemp;
2 •   select max(age)from tbl_details;
```

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

max(age)
44

Result 41 ×

Output

Action Output

5. select sum(age)from tbl_details;

Query 1 ×

Limit to 1000 rows

```
1 •   use   db_aggemp;
2 •   select sum(age)from tbl_details;
```

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

sum(age)
220

Result 43 ×

Output

Action Output

6. select Avg(age)from tbl_details;

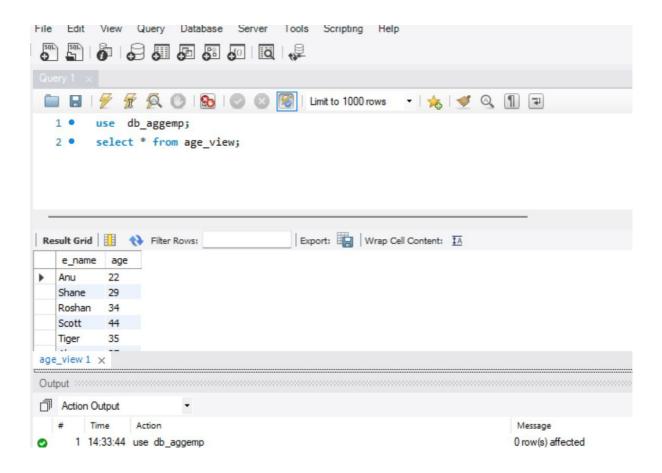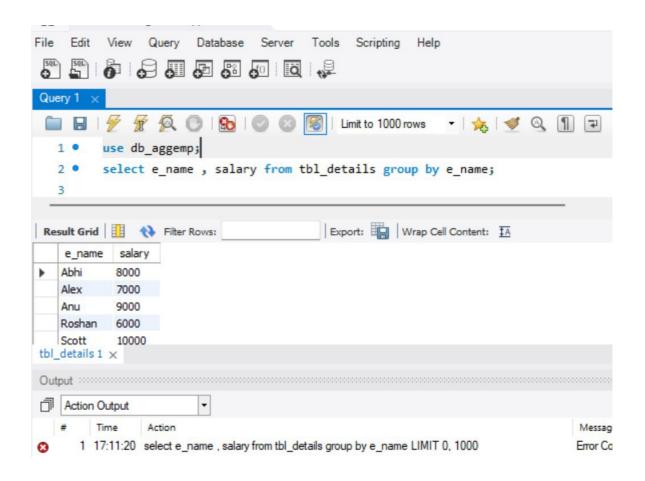7. create view age_view as select e_name, age from tbl_details;

8. select *from details_view;

9. select e_name , salary from tbl_details group by e_name;

File   Edit   View   Query   Database   Server   Tools   Scripting   Help

Query 1 ×

Limit to 1000 rows

```
1 •    use db_aggemp;
2 •    select e_name , salary from tbl_details group by e_name;
3
```

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

e_name	salary
▶ Abhi	8000
Alex	7000
Anu	9000
Roshan	6000
Scott	10000

tbl_details 1 ×

Output

Action Output

#	Time	Action	Messag
❌ 1	17:11:20	select e_name , salary from tbl_details group by e_name LIMIT 0, 1000	Error Co

10. select e_name , salary from tbl_details order by salary asc; OR

select e_name , salary from tbl_details order by salary ;

Query 1 ×

Limit to 1000 rows

```
1 •    use  db_aggemp;
2 •    select * from age_view;insert into tbl_details values(101,"Anu",22,9000);
3 •    create view age_view as select e_name, age from tbl_details;
4 •    select e_name, salary from tbl_details group by e_name;
5 •    select e_name , salary from tbl_details order by salary asc;
```
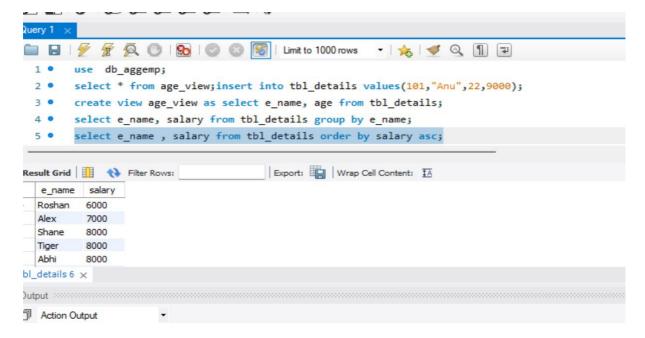
Result Grid | Filter Rows: | Export: | Wrap Cell Content: IA

e_name	salary
Roshan	6000
Alex	7000
Shane	8000
Tiger	8000
Abhi	8000

bl_details 6 ×

Output

Action Output

11. select e_name , salary from tbl_details order by salary DESC;

```
2 ●    select * from age_view;insert into tbl_details values(101,"Anu",22,9000);
3 ●    create view age_view as select e_name, age from tbl_details;
4 ●    select e_name, salary from tbl_details group by e_name;
5 ●    select e_name , salary from tbl_details order by salary asc;
6 ●    select e_name , salary from tbl_details order by salary desc;
7
```
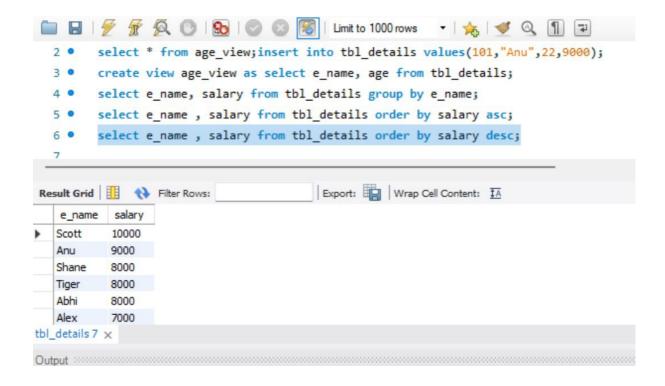
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

e_name	salary
Scott	10000
Anu	9000
Shane	8000
Tiger	8000
Abhi	8000
Alex	7000

tbl_details 7 ×

Output

GROUP 3

1.   Consider the database for a college and design an ER diagram. Write the query for the following.

(1.i)   Create thetables:

Student (sid, sname, sex,

dob,dno) Department (dno,

dname)

Faculty (F_id, fname, designation,

salary,dno) Course (cid, cname, credits,dno)

Register (sid,cid,sem)

Teaching

(f_id,cid,sem)

Hostel(hid,hname,seats,

)

(1.ii)   Include the necessary constraints NOT NULL, DEFAULT, CHECK, and PRIMARY KEY, UNIQUE.

(1.iii)   Create a databasecollege

(1.iv)   Use college as the currentdatabase

(1.v)   Display all the tables in collegedatabase

(1.vi)   Describe the structure of alltables

(1.vii)   Modify the student table to add a new field'grade'

Consider the database for a college. Write the query for the following.

- Insert at least 5 tuples into each table.

- List the details of students in the ascending order of date of birth

- Display the details of students from computer department

- List the faculties in the descending order of salary

- Display the total number of students in each department

- Display the total number of faculties in each department with salary greater than 25000

create database db_college;

use db_college;

create table tbl_student(sid int(5) primary key,sname varchar(15) not null,dob date,sex varchar(8),dname varchar(10));

create table tbl_depart(dno varchar(6) primary key,dname varchar(10));

create table tbl_faculty(F_id int(6)primary key, fname varchar(15), designation varchar(10), salary float(15),dno varchar(6));

create table tbl_course(cid int(6)primary key, cname varchar(15), credits int(3),dno varchar(6));

create table tbl_regi(sid int(5),cid int(6),sem int (2));

create table tbl_teaching(f_id int(6),cid int(6),sem int(2));

create table tbl_hostel(hid int(6) primary key,hname varchar(15)not null,seats int(3));

show tables;

```
4 •    create table tbl_faculty(F_id int(6)primary key, fname varchar(15), designation varch
5 •    create table tbl_course(cid int(6)primary key, cname varchar(15), credits int(3),dno
6 •    create table tbl_regi(sid varchar(5),cid int(6),sem int (2));
7 •    create table tbl_teaching(f_id int(6),cid int(6),sem int(2));
8 •    create table tbl_hostel(hid int(6) primary key,hname varchar(15)not null,seats int(3)
9 •    show tables;
```

Tables_in_db_college
tbl_course
tbl_depart
tbl_faculty
tbl_hostel
tbl_regi
tbl_student
tbl_teaching

describe tbl_student;

describe tbl_depart;

describe tbl_faculty;

describe tbl_course;

describe tbl_regi;

describe tbl_teaching;

describe tbl_hostel;

Limit to 1000 rows

```
4 •   create table tbl_faculty(F_id int(6)primary key, fname varchar(15), designation varcha
5 •   create table tbl_course(cid int(6)primary key, cname varchar(15), credits int(3),dno va
6 •   create table tbl_regi(sid varchar(5),cid int(6),sem int (2));
7 •   create table tbl_teaching(f_id int(6),cid int(6),sem int(2));
8 •   create table tbl_hostel(hid int(6) primary key,hname varchar(15)not null,seats int(3));
9 •   show tables;
10 •  describe tbl_student;
```
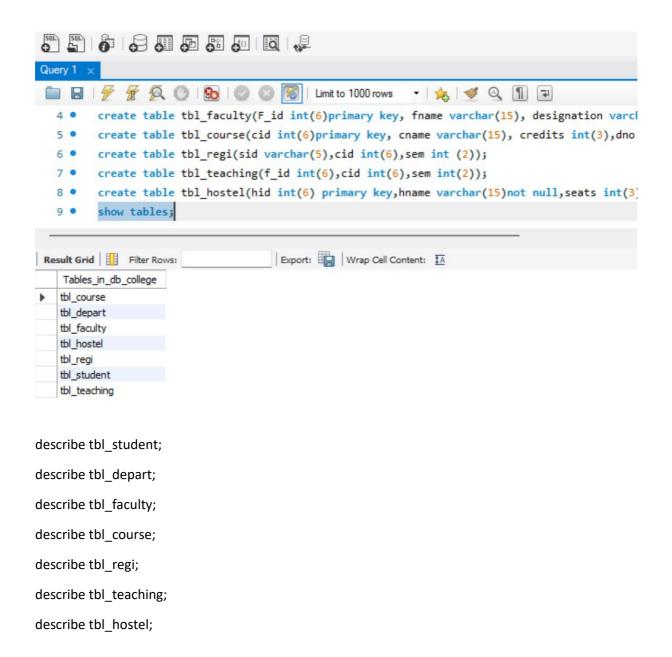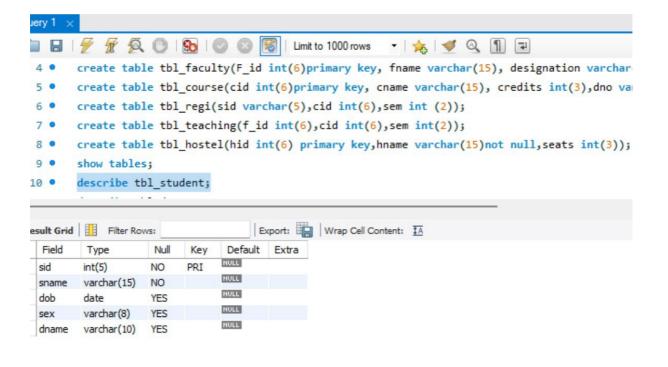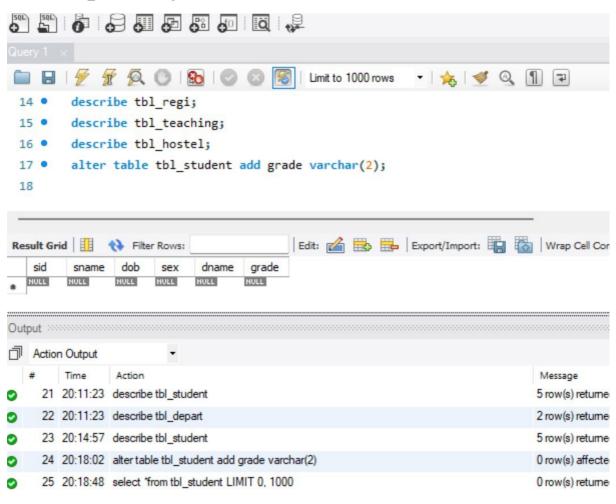
esult Grid | Filter Rows: | Export: | Wrap Cell Content: ΞA

Field	Type	Null	Key	Default	Extra
sid	int(5)	NO	PRI	NULL	
sname	varchar(15)	NO		NULL	
dob	date	YES		NULL	
sex	varchar(8)	YES		NULL	
dname	varchar(10)	YES		NULL	

alter table tbl_student add grade varchar(2);

Limit to 1000 rows

```
14 •  describe tbl_regi;
15 •  describe tbl_teaching;
16 •  describe tbl_hostel;
17 •  alter table tbl_student add grade varchar(2);
18
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Con

sid	sname	dob	sex	dname	grade
NULL	NULL	NULL	NULL	NULL	NULL

Output

Action Output

#	Time	Action	Message
✓	21 20:11:23	describe tbl_student	5 row(s) returne
✓	22 20:11:23	describe tbl_depart	2 row(s) returne
✓	23 20:14:57	describe tbl_student	5 row(s) returne
✓	24 20:18:02	alter table tbl_student add grade varchar(2)	0 row(s) affecte
✓	25 20:18:48	select *from tbl_student LIMIT 0, 1000	0 row(s) returne

insert into tbl_student values(101,"manoj","2000-04-13","male","maths");

```sql
insert into tbl_student values(103,"trisha","1999-05-10","female","dca");

insert into tbl_student values(104,"jacob","2000-07-03","male","ecnomics");

insert into tbl_student values(105,"martin","1999-06-07","male","maths");

insert into tbl_student values(106,"anjana","2000-01-31","female","ecnomics");
```