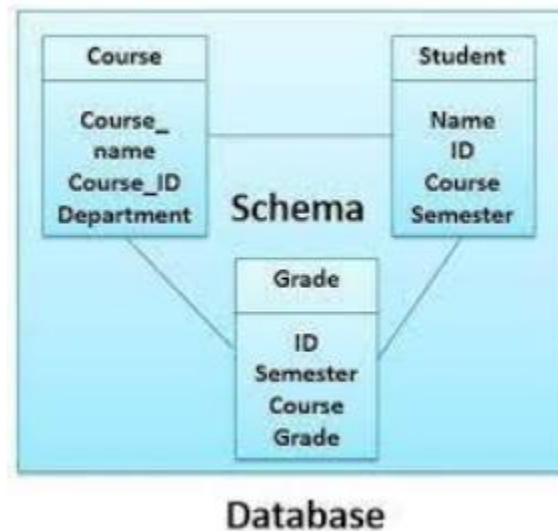


CS 262 – Database Management Systems Lab



WEEK 1 PROBLEMS

1. Create the tables in the database.

Query:

```
SQL> create table Course( Course_Name varchar(10),
                           Course_ID number,
                           Department varchar(10));
```

Output:

Table created.

Query:

```
SQL> create table Student( Name varchar(20),
                           Student_ID number,
                           Course varchar(10),
                           Semester number);
```

Output:

Table created.

Query:

```
SQL> create table Grade( ID varchar(10),  
                           Semester number,  
                           Course varchar(10),  
                           Grade number);
```

Output:

Table created.

2. Alter the course table by adding a new attribute instructor.

Query:

```
alter table Course add instructor varchar(20);
```

Output:

Table altered.

3. Alter the student table by modifying the datatype of Student_ID.

Query:

```
alter table Student modify Student_ID varchar(10);
```

Output:

Table altered.

4. Alter the course table by dropping instructor attribute.

Query:

```
alter table Course drop column instructor;
```

Output:

Table altered.

5. Show the structure of the grade table.

Query:

desc Grade; (or)

describe Grade;

Output:

<u>Name</u>	<u>Null?</u>	<u>Type</u>
<u>ID</u>		<u>VARCHAR2(10)</u>
<u>SEMESTER</u>		<u>NUMBER</u>
<u>COURSE</u>		<u>VARCHAR2(10)</u>
<u>GRADE</u>		<u>NUMBER</u>

6. Load the database with data using insert statements.

Query:

insert into Course values("P and S", 211, "CSE");

insert into Course values("DMS", 212, "CSE");

insert into Course values("CO", 213, "CSE");

insert into Course values("DS", 214, "CSE");

insert into Course values("OOP", 215, "CSE");

insert into Student values("Tayyab", "Y21CS172", "Machine Learning", 3);

insert into Student values("Neeraj", "Y21CS185", "Web Development", 3);

insert into Student values("Roshan", "Y21CS160", "Cyber Security", 3);

insert into Student values("Karthik", "Y21CS169", "Data Science", 3);

insert into Grade values('Y21CS172', 3, 'P and S', 9);

insert into Grade values('Y21CS172', 3, 'DMS', 9);

insert into Grade values('Y21CS172', 3, 'CO', 7);

insert into Grade values('Y21CS172', 3, 'DS', 8);

insert into Grade values('Y21CS172', 3, 'OOP', 9);

Output:

row created.

7. Retrieve the contents of a table using select statements.**Query:**

select * from Course;

select * from Student;

select * from Grade;

Output:

P and S|211|CSE

DMS|212|CSE

CO|213|CSE

DS|214|CSE

OOP|215|CSE

Tayyab|Y21CS172|Machine Learning|3

Neeraj|Y21CS185|Web Development|3

Roshan|Y21CS160|Cyber Security|3

Karthik|Y21CS169|Data Science|3

Y21CS172|3|P and S|9

Y21CS172|3|DMS|9

Y21CS172|3|CO|7

Y21CS172|3|DS|8

Y21CS172|3|OOP|9

8. Modify the contents of tables using update statements.**Query:**

update Course set Course_Name = 'CS' where Course_ID = 211;

Output:**9. Delete selected records from the tables.****Query:**

delete from Students where Name = 'Neeraj';

10. Truncate a table.**Query:**

truncate table Student;

11.Drop a table.

Query:

drop table Grade;

12.Commit the changes made to the database.

Query:

commit;