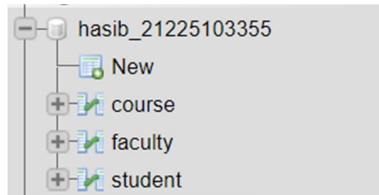# LAB REPORT : 01

Create Student, Faculty, Course Table :
Query:

create table Student(Name varchar(30), Student_ID int(20), NID int(20),Intake int(5), section int(3),CGPA float(4.4));

create table Faculty (Name varchar(30),Short_code varchar(10),Course_Code varchar(10),Conduct_Semester varchar(10))
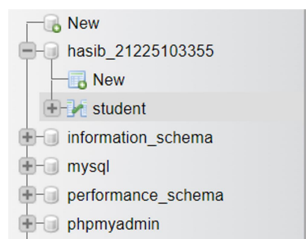
create table Course (Course_Title varchar(30),Course_Code varchar(10));

Insert Values into 'Student' Table Query:
Query:

insert into student values('Ashraful',1,102,44,1,3.30);
insert into student values('Tonny',2,101,44,1,3.50);
insert into student values('Zakir',33,103,35,2,3.98);
insert into student values('Urmi',6,104,35,1,3.96);
insert into student values('Tonny',23,105,44,1,3.50);

Name	Student_ID	NID	Intake	section	CGPA
Ashraful	1	102	44	1	3.3
Tonny	2	101	44	1	3.5
Zakir	33	103	35	2	3.98
Urmi	6	104	35	1	3.96
Tonny	23	105	44	1	3.5

Insert Values into 'Faculty' Table Query:
Query:

insert into faculty values('Farha Akter Munmun','FAM','CSE319','Summer2019');
insert into faculty values('Sweety line','SWL','CSE209','Fall2019-20');
insert into faculty values('Shumi Khatun','SKN','NULL','Summer2019');
insert into faculty values('Nadia Afrin Ritu','NULL','CSE351','NULL');

Name	Short_code	Course_Code	Conduct_Semester
Farha Akter Munmun	FAM	CSE319	Summer2019
Sweety line	SWL	CSE209	Fall2019-2
Shumi Khatun	SKN	CSE213	Summer2019
Nadia Afrin Ritu	NAR	CSE351	Fall 2023

Insert Values into 'Course' Table Query:
Query:

insert into course values('Database System','CSE207');
insert into course values('Computer Network','CSE319');
insert into course values('Data Communication','CSE209');
insert into course values('System Analysis Design','NULL');

Course_Title	Course_Code
Database System	CSE207
Computer Network	CSE319
Data Communication	CSE209
System Analysis Design	NULL

A) Update the short code whose short code is NULL.
Query:
update faculty set Short_code='NAR' where Name='Nadia Afrin Ritu';

Name	Short_code	Course_Code	Conduct_Semester
Farha Akter Munmun	FAM	CSE319	Summer2019
Sweety line	SWL	CSE209	Fall2019-2
Shumi Khatun	SKN	NULL	Summer2019
Nadia Afrin Ritu	NAR	CSE351	NULL

B) Update the course code that is NULL.
Query:
update faculty set Course_code='CSE213' where Name='Shumi Khatun';

Name	Short_code	Course_Code	Conduct_Semester
Farha Akter Munmun	FAM	CSE319	Summer2019
Sweety line	SWL	CSE209	Fall2019-2
Shumi Khatun	SKN	CSE213	Summer2019
Nadia Afrin Ritu	NAR	CSE351	NULL

C) Update the conduct semester that is NULL.
Query:
update faculty set Conduct_Semester='Fall 2023' where Course_Code='CSE351';

Name	Short_code	Course_Code	Conduct_Semester
Farha Akter Munmun	FAM	CSE319	Summer2019
Sweety line	SWL	CSE209	Fall2019-2
Shumi Khatun	SKN	CSE213	Summer2019
Nadia Afrin Ritu	NAR	CSE351	Fall 2023

D) Add a new column named "Age" in student relation.
Query:
    alter table student ADD column Age int(2);

Name	Student_ID	NID	Intake	section	CGPA	Age
Ashraful	1	102	44	1	3.3	NULL
Tonny	2	101	44	1	3.5	NULL
Zakir	33	103	35	2	3.98	NULL
Urmi	6	104	35	1	3.96	NULL
Tonny	23	105	44	1	3.5	NULL

E) Update the age of each student.
Query:
    update student set Age='23' where NID='102';
    update student set Age='23' where NID='101';
    update student set Age='23' where NID='103';
    update student set Age='23' where NID='104';
    update student set Age='23' where NID='105';

Name	Student_ID	NID	Intake	section	CGPA	Age
Ashraful	1	102	44	1	3.3	22
Tonny	2	101	44	1	3.5	22
Zakir	33	103	35	2	3.98	25
Urmi	6	104	35	1	3.96	25
Tonny	23	105	44	1	3.5	22

F) Find the names of all Courses in the Course relation.
Query:
    select Course_Title from course;

Course_Title
Database System
Computer Network
Data Communication
System Analysis Design

G) Find the names of all teachers who has conducted in summer 2019.
Query:
    select name from faculty where Conduct_Semester='Summer2019';

name
Farha Akter Munmun
Shumi Khatun

H) Find the names of all students whose CGPA is greater than 3.50.
Query:
    select Name from student where CGPA>3.50;

Name
Zakir
Urmi

I) Add a new column "Offered semester" after the column "Course Title".
Query:

    alter table course ADD column Offered_Semester varchar(25) after Course_Title;

Course_Title	Offered_Semester	Course_Code
Database System	NULL	CSE207
Computer Network	NULL	CSE319
Data Communication	NULL	CSE209
System Analysis Design	NULL	NULL

J) Find the name and CGPA of each student order by their CGPA (Ascending order.).
Query:

    select Name, CGPA from student order by CGPA asc;

Name	CGPA ▲ 1
Ashraful	3.3
Tonny	3.5
Tonny	3.5
Urmi	3.96
Zakir	3.98

K) Find the name of all students whose age is greater than 22 and CGPA is greater than 3.50.
Query:

    select Name from student where Age>22 AND CGPA>3.50;

Name
Zakir
Urmi

L) Find the Id of all those students who are from 44 intake or CGPA is less than 3.40.
Query:

    select student_id from student where intake=44 OR CGPA<3.40;

student_id
1
2
23

M) Find the Id of all those students whose CGPA is 3.30 or 3.50 or 3.96.
Query:
select student_id from student where CGPA=3.30 or CGPA=3.50 or CGPA=3.96;

student_id
2
23