

- ❖ Download given database (university.sql) and import it using phpmyadmin.
- ❖ There are 4 tables in the given database. Can you identify the relationships among the tables?

SQL Alias

- SQL alias is used to give a temporary name for a table or a column.
- Alias is often used to make column names more readable.
- An alias only exists for the duration of the query.

```
SELECT  
column_name AS alias_name  
FROM table_name
```

Ex:

```
SELECT first_name AS Fname , dob AS birthday  
FROM Student;
```

Select/view Records

1. How to display the student name in one column. (use **CONCAT**)

```
SELECT CONCAT (first_name,"",last_name)  
AS Student_Name  
FROM Student;
```

2. Display the Student ID and birth year of each student.

```
SELECT  
student_id , YEAR(dob) AS Birth_Year  
FROM student;
```

3. Find the length of each student's first name.

```
SELECT LENGTH (first_name) AS Length  
FROM student;
```

ORDER BY

4. Display id, name and birthdate of students in descending order of birthdate and ascending order of surname.

```
SELECT student_id,first_name,last_name,dob  
FROM Student  
ORDER BY dob DESC,last_name;
```

5. Display all details of students in descending order of surname and descending order of student ID.

```
SELECT * FROM Student
ORDER BY
last_name DESC, student_id DESC;
```

6. Display all details of male students in ascending order of first name.

```
SELECT * FROM student
WHERE gender = "M"
ORDER BY first_name;
```

GROUP BY - This clause is used to group the result set by one or more columns.

7. Display the total marks of each student.

```
SELECT s_student_id, SUM(marks) AS Total
FROM marks
GROUP BY s_student_id;
```

8. Count the number of records for each student and display in descending order of StudentID.

```
SELECT s_student_id , Count(marks)
FROM marks
GROUP BY s_student_id
ORDER BY s_student_id DESC;
```

SQL Join

9. Display the details of modules with the details of the lecturer who conduct each module.

```
SELECT * FROM module,lecturer
WHERE l_lecturer_id=lecturer_id;
```

```
SELECT * FROM module
JOIN Lecturer
ON l_lecturer_id=lecturer_id;
```

10. Display the details of students who gained marks.

```
SELECT * FROM
student AS S
INNER JOIN
marks AS M
ON S.student_id = M.s_student_id
```