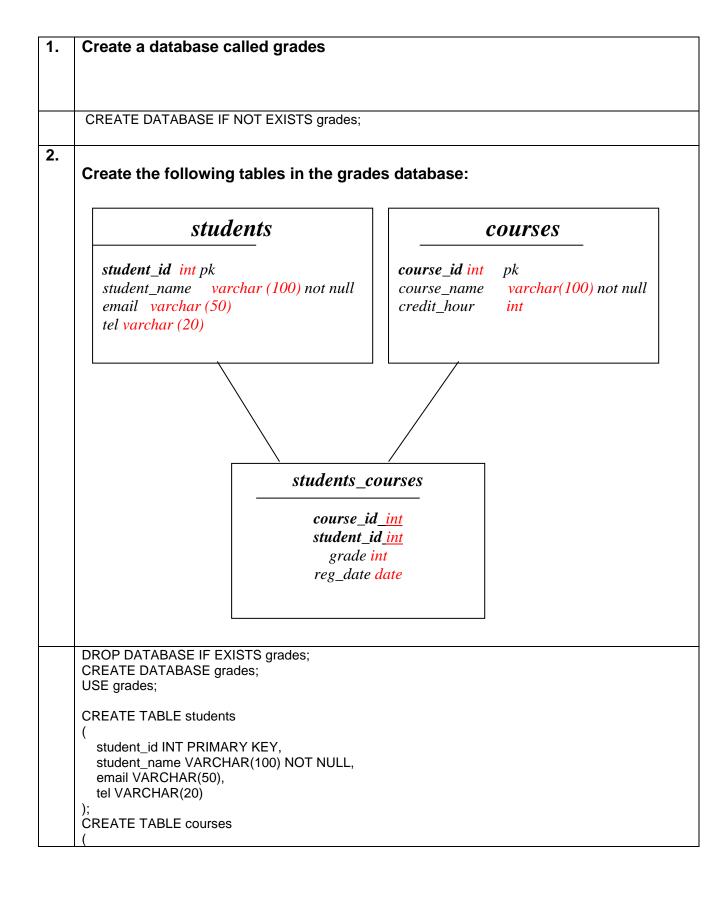
MySQL Labs

MySQL (Day1):



```
course id INT PRIMARY KEY,
       course_name VARCHAR(100) NOT NULL,
       credit hour INT
     CREATE TABLE students_courses
       course_id INT,
       student_id INT,
       grade INT,
       reg date DATE,
       PRIMARY KEY(course id, student id),
       KEY fk students courses courses idx (course id).
       KEY fk students courses students idx (student id),
       CONSTRAINT fk_students_courses_courses FOREIGN KEY (course_id) REFERENCES courses
       CONSTRAINT fk students courses students FOREIGN KEY (student id) REFERENCES students
     (student_id)
     Modify the Students table to allow for longer Student names (150 char)
3
     Confirm your modification.
     ALTER TABLE students
     MODIFY student_name VARCHAR(150) NOT NULL;
4
     Add constraint to force unique email for each student
     ALTER TABLE students
     MODIFY email VARCHAR(50) UNIQUE;
     Get Time, Date, Current user, MySQL Version using prompt?
5
     SELECT CURRENT TIME(), CURRENT DATE(), CURRENT USER(), VERSION();
     CURRENT_TIME()
                          CURRENT_DATE()
                                                CURRENT_USER()
                                                                      VERSION()
     18:55:10
                          2023-01-13
                                                root@localhost
                                                                      10.4.27-MariaDB
6
     Add gender column for the students table. It holds two value (male or female)
     ALTER TABLE students
     ADD COLUMN gender ENUM('male', 'female')
7
     Add birth_date column for the students table.
     ALTER TABLE students
     ADD COLUMN birth_date DATE
     Drop the student name column and replace it with first name and last name.
8
     ALTER TABLE students
     DROP COLUMN student name,
     ADD COLUMN first name VARCHAR(50) NOT NULL.
     ADD COLUMN last_name VARCHAR(50) NOT NULL;
9
     Insert your friend's data into the table students.
     INSERT INTO students VALUES
       DEFAULT,
       'ranayoussef@gmail.com',
       '01128554805'.
       'female'.
       '1997-07-07',
       'Rana'.
       'Youssef'
```

```
(
DEFAULT,
'karimali@gmail.com',
'01128554222',
'male',
'1996-10-20',
'Karim',
'Ali'
)

10 Create a new table (male_students) based on students table and fill it with the data of male students

CREATE TABLE male_students LIKE students;
INSERT INTO male_students
SELECT * FROM students
WHERE students.gender = 'male';
```

Part II Create another database "php"

Use php

Run Lab Script then answer the following

1	Display all students' information.
	SELECT * FROM students
2	Display male students only.
	SELECT * FROM students WHERE gender = 'male';
3	Display the <u>number of female</u> students.
	SELECT COUNT(gender) FROM students WHERE gender = 'female';
4	Display the students' data for the students who are born before 1992-10-01.
	SELECT * FROM students WHERE birth_date < '1992-10-01';
5	Display the <u>students' data</u> for the male students who are born before 1991-10-01.
	SELECT * FROM students WHERE birth_date < '1991-10-01' AND gender = 'male';
6	Display <u>course id</u> and their grades sorted by grades.
	SELECT course_id , grade FROM students_courses ORDER BY grade
7	Display students' names that begin with A.
	SELECT first_name FROM students WHERE first_name REGEXP '^A';
8	Display the gender, number of males and females.
	SELECT gender , COUNT(gender) FROM students GROUP BY gender;
9	Display the <u>repeated first names</u> and <u>their counts</u> if higher than 2.
	SELECT first_name , COUNT(first_name) FROM students GROUP BY first_name HAVING COUNT(first_name) > 2;
10	Display the subject with highest grade
	SELECT MAX(grade) FROM students_courses