# MySQL Labs

MySQL (Day1): Mariam khaled Saad Ibrahim (open source)

1.	Create a database called grades
	Create database grades;
2.	Create the following tables in the grades database:
	students courses
	student_id int pk student_name varchar (100) not null email varchar (50) tel varchar (20)  course_id int pk course_name varchar(100) not null credit_hour int
	students_courses
	course_id_ <u>int</u> student_id_ <u>int</u> grade int reg_date date
	<ul> <li>create table students(student_id int,student_name varchar(100) NOT NULL,email varchar(50),tel varchar(20),PRIMARY KEY (student_id));</li> </ul>
	<ul> <li>create table courses(course_id int,course_name varchar(100) NOT NULL,credit_hour int,PRIMARY KEY (course_id));</li> </ul>
	<ul> <li>create table students_courses(course_id int,student_id int,grade int,reg_date date,PRIMARY KEY(course_id,student_id),FOREIGN KEY(course_id) REFERENCES courses(course_id),FOREIGN KEY(student_id) REFERENCES students(student_id));</li> </ul>
3	Modify the students table to allow for longer Student names (150 char) Confirm your modification.
	ALTER TABLE students MODIFY student_name varchar(150);
4	Add constraint to force unique email for each student

	ALTER TABLE students ADD UNIQUE (email);
5	Get Time, Date, Current user, MySQL Version using prompt?
	select current_date();
	<ul><li>select current_time();</li></ul>
	• select @@version;
	<ul><li>select current_user();</li></ul>
6	Add gender column for the students table. It holds two value (male or female)
	alter table students add gender ENUM('male','female');
7	Add birth_date column for the students table.
	alter table students add birth_date date;
8	Drop the student_name column and replace it with first name and last name.
	alter table students add first_name varchar(100);
	<ul><li>alter table students add last_name varchar(100);</li></ul>
	<ul> <li>alter table students drop student_name;</li> </ul>
9	Insert your friend's data into the table students.
	insert into students (student_id , first_name , last_name ,email ,tel , gender , birth_date ) values (1 , "hager" , "khaled" , "hager@gmail.com",
	01144342836 , 'female' , '1999-02-19');
10	Create a new table (male_students) based on students table and fill it with
	the data of male students
	create table male_students select * from students where 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(student_id) from students where gender='female';
4	Display the students' data for the students who are born before 1992-10-01.
	select birth_date 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 birth_date 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 like "a%";
8	Display the gender, number of males and females.
	select gender,count(student_id) 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() from students group by first_name having count() > 2
10	Display the <u>subject with highest grade</u>
	select course_name from courses c,students_courses sc where c.course_id=sc.course_id order by grade desc limit 1;