MySQL Labs

MySQL (Day1):

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1.	**Create a database called grades**
	Create database grades;
2.	**Create the following tables in the grades database:**

students

student_id *int pk*
student_name   varchar (100) not null
email   varchar (50)
tel varchar (20)

courses

course_id int   pk
course_name   varchar(100) not null
credit_hour   int

students_courses

course_id int
student_id int
grade int
reg_date date

- **create table students(student_id int,student_name varchar(100) NOT NULL,email varchar(50),tel varchar(20),PRIMARY KEY (student_id));**

- **create table courses(course_id int,course_name varchar(100) NOT NULL,credit_hour int,PRIMARY KEY (course_id));**

- **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));**

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(); - select current_time(); - select @@version ; - select current_user();
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); - alter table students add last_name varchar(100); - alter table students drop student_name;
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";

Create another database "php"

Use php

Run Lab Script then answer the following

1	**Display all students' information.**
	select * from students;
2	**Display <u>male</u> 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 <u>students' data</u> 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 <u>students' names</u> that begin with A.**
	select first_name from students where first_name like "a%";
8	**Display the <u>gender, number of males and females.</u>**
	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 ;