

FINAL Exam: DATABASE

WEP 2024

{3h 00}

25 JAN 2023

RULES:

- Chatting and talking to other students is forbidden
- You are allowed to use PhpMyAdmin or VSCode or any other software. But it is not required
- Write (copy/paste) your answer below the question. Do not screenshot.

HOW DO I SUBMIT THE EXAM?

- Save this document as a yourfullname.PDF file
- In Google Classroom, attach this file to submit.

EXERCISES	POINTS
THOERYS	20
EXERCISE 1	20
EXERCISE 2	20
EXERCISE 3	20
EXERCISE 4	20
EXERCISE 5	20
TOTAL	100

I. Exercise 03 (20 points) Basic SQL Query

Write SQL query to create tables that have in Entity Relational Diagram (ERD) below:



Your Query:

Class-table:

```
create table class(  
    -> class_id int not null primary key auto_increment,  
    -> Name varchar(200)  
    -> );
```

Students:

```
create table students(  
    -> stu_id int not null primary key auto_increment,  
    -> First_Name varchar(200),  
    -> Last_Name varchar(200),  
    -> classID int not null,  
    -> foreign key(classID) references class(class_id)  
    -> );
```

Teachers:

```
create table teachers(  
    -> teacher_id int not null primary key auto_increment,  
    -> First_Name varchar(200),  
    -> Last_Name varchar(200)  
    -> );
```

Subjects:

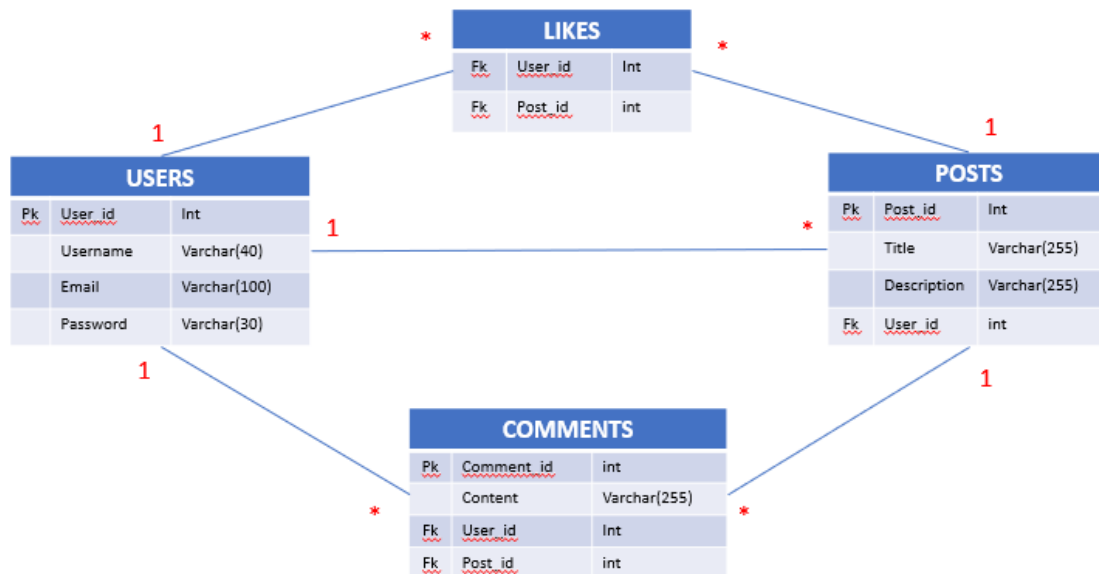
```
create table subjects(
  -> sub_ID int not null primary key auto_increment,
  -> Title varchar(200),
  -> teacherID int not null,
  -> foreign key(teacherID) references teachers(teacher_id)
  -> );
```

Scores:

```
create table score(
  -> studentID int not null,
  -> foreign key(studentID) references students(stu_id),
  -> subID int not null,
  -> foreign key(subID) references subjects(sub_ID),
  -> score int
  -> );
```

II. Exercise 04 (20 points) SQL Query Select

Important: Import database name "database_final_exam.sql" into your databases.



Q1 – (10 POINTS): Write a SQL statement to display all POSTS for the user named "Rady Y"

Expected result:

title	description
Play football	Joining the match with my students
Fishing day!	I when to my hometown this weekend

Your Query:

```
select posts.title, posts.description FROM posts INNER JOIN users ON posts.user_id =
users.user_id WHERE username = "Rady Y";
```

Q2 – (10 POINTS): Write a SQL statement to display the username of who likes on many posts.

Expected result:

username	number of likes
Him HEY	3

Your Query:

```
select users.username,count(post_id) NumberOfLikes FROM likes INNER JOIN users ON
likes.user_id = users.user_id WHERE username = "Him Hey";
```

