

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.

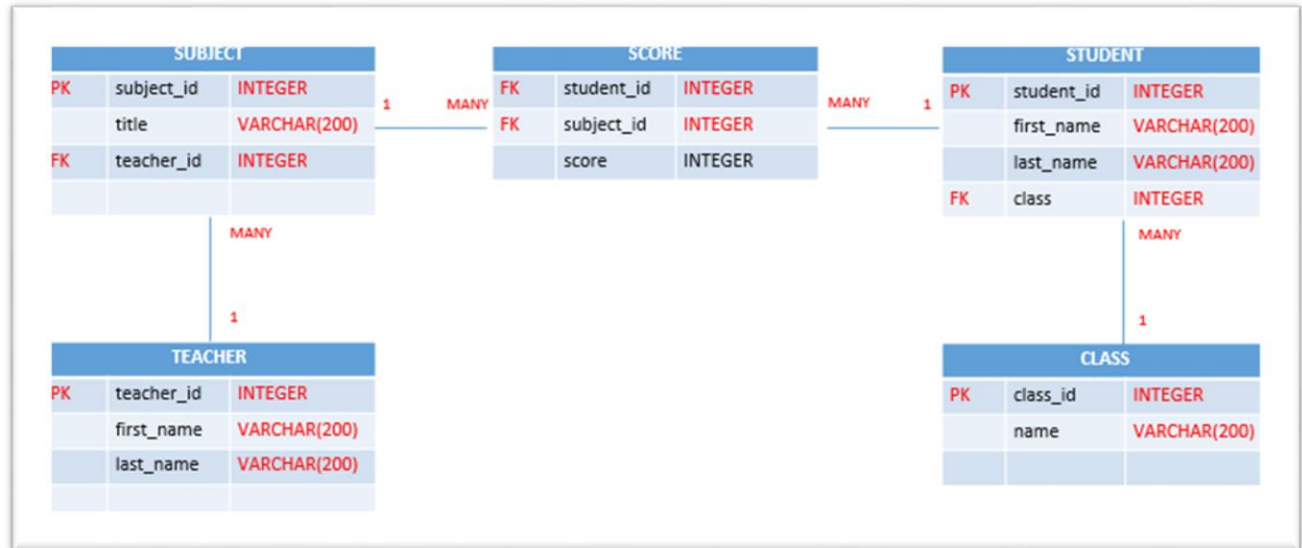
HOW DO I SUBMIT THE EXAM?

- 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:

TEACHER:

```
CREATE TABLE TEACHERS (  
Teacher_id int(11) NOT NULL AUTO_INCREMENT PRIMARY KEY,  
First_name VARCHAR(20),  
Last_name VARCHAR(20)  
);
```

SUBJECT:

```
CREATE TABLE SUBJECTS (  
Subject_id int(11) NOT NULL AUTO_INCREMENT PRIMARY KEY,  
Title VARCHAR (100),  
Teacher_id int(11),  
FOREIGN KEY (teacher_id) REFERENCES TEACHERS(teacher_id)  
);
```

CLASS:

```
CREATE TABLE CLASS(  
Calss_id int(11) NOT NULL AUTO_INCREMENT PRIMARY KEY,  
Name VARCHAR(20)  
);
```

STUDENTS:

```
CREATE TABLE STUDENTS (  
Student_id int(11) NOT NULL AUTO_INCREMENT PRIMARY KEY,  
First_name VARCHAR(20),  
Last_name VARCHAR(20),  
Class_id (11),
```

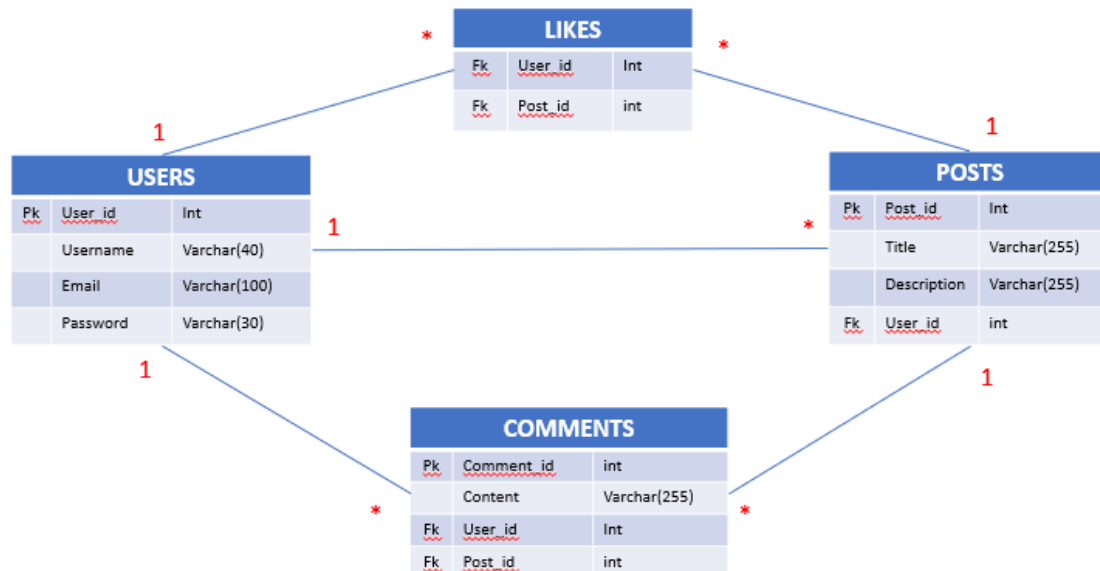
```
FOREIGN KEY (Class_id) REFERENCES CLASS(Class_id)
);
```

SCORE:

```
CREATE TABLE SCORE(
Student_id int(),
Subject_id int(),
FOREIGN KEY (Student_id) REFERENCES STUDENTS(Student_id),
FOREIGN KEY (Subject_id) REFERENCES SUBJECTS(Subject_id),
Score int(100)
);
```

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 title, description FROM posts where user_id=3;`

```

MariaDB [school]> SELECT title, description FROM posts where user_id=3;
+-----+-----+
| title      | description |
+-----+-----+
| Play football | Joining the match with my students |
| Fishing day! | I when to my hometown this weekend |
+-----+-----+
2 rows in set (0.003 sec)

MariaDB [school]>

```

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 username, post_id from likes INNER JOIN users ON likes.user_id = users.user_id WHERE username ="Him HEY" AND post_id = 3;

```

MariaDB [school]> select username, post_id from likes INNER JOIN users ON likes.user_id = users.user_id WHERE username ="Him HEY" AND post_id = 3;
+-----+-----+
| username | post_id |
+-----+-----+
| Him HEY  | 3 |
+-----+-----+
1 row in set (0.000 sec)

```