This assessment consists of two parts: ode block and a quiz.

Part 1: Code Blocks

To complete this part of the assessment, you can use MySQL database management system available on the Coursera platform.

Instructions

The questions in this assessment relate to a sports club that needs to build a digital database to maintain data about the players joining the club.

Run each complete SQL statement you write in this part to develop the database for the sports club.

Important

Remember to end each complete SQL statement with a semicolon.

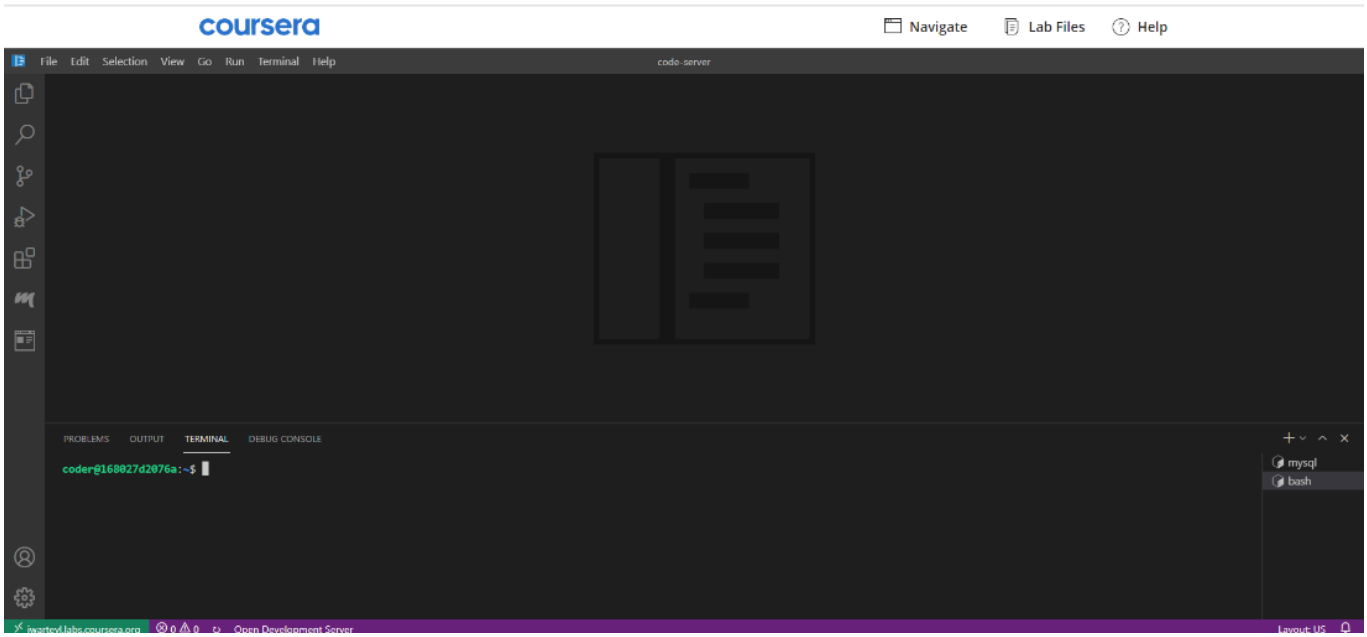
Make sure you leave a space between the SQL terms and the operators.

For example, a *correctly formatted* SQL statement must be written as follows:

- SELECT 5 + 7;

Here is an example of an *incorrectly formatted* SQL statement in which there is no semicolon, and no spaces are placed before or after the operator:

- SELECT 5+7



1. Write an SQL statement to create a database called "SportsClub". **1 / 1 punto**

```
CREATE DATABASE SportsClub;
```

Correcto
Correct! This is the right syntax to create the sports club database.

2. In the text field below, input the missing keyword (___) from the following SQL statement to create a table called "Players". **1 / 1 punto**

```
1  CREATE ____ Players (playerID INT, playerName VARCHAR(50), age INT, PRIMARY KEY(pl
```

Run the complete SQL statement in MySQL to create the table in the club database.

```
TABLE
```

Correcto
Correct! TABLE is the missing keyword to create the ‘Players’ table.

3. In the text field below, input the missing keyword (___) from the following SQL statement to insert data into the "Players" table. **1 / 1 punto**

```
1  INSERT INTO Players (playerID, playerName, age) ____ (1, "Jack", 25);
```

Run the complete SQL statement in MySQL to insert the record of data in the players table.

```
VALUES
```

Correcto
Correct! VALUES is the missing keyword to insert data into the “Players” table.

4. Insert three more records into the "Players" table that contain the following data: **1 / 1 punto**

- (2, "Karl", 20)
- (3, "Mark", 21)
- (4, "Andrew", 22)

Once you have executed the INSERT INTO statement to enter these three records of data, run the following SQL statement:

```
SELECT playerName FROM Players WHERE playerID = 2;
```

What is the playerName that appears on the screen?

Karl

Correcto
Correct! Karl is the player's name with ID number 2.

5. Write a SQL statement that outputs all players names in the "Players" table. When you run the right SQL query, you should have the following output result:

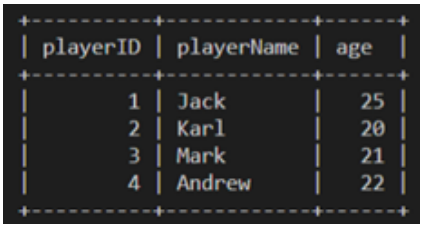
1 / 1 punto

SELECT playerName FROM Players;

Correcto
Correct! This is the right syntax to output all players names existing in the “Players” table.

6. The following table called "Players", contains four records of data. Write a SQL statement that updates the age of the player with ID = 3. The new age value should be '22'.

1 / 1 punto

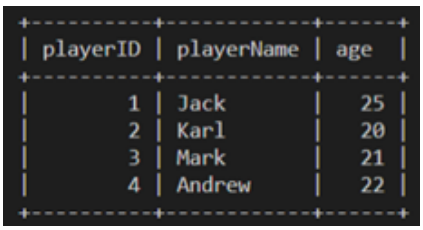


playerID	playerName	age
1	Jack	25
2	Karl	20
3	Mark	21
4	Andrew	22

```
UPDATE Players SET age = 22 WHERE playerID = 3;
```

Correcto
Correct! This is the right syntax to update the age of the player with ID = 3.

7. The following table called "Players", contains four records of data. Write a SQL statement that deletes the record of the player with ID = 4. **1 / 1 punto**



playerID	playerName	age
1	Jack	25
2	Karl	20
3	Mark	21
4	Andrew	22

```
DELETE FROM Players WHERE playerID = 4;
```

Correcto
Correct! This is the right syntax to delete the player with ID 4;

8. Write an SQL statement that evaluates if the PlayerID in the following "Players" table is odd or even. **1 / 1 punto**

Hint: Assume X is a number. If the remainder of X divided by 2 is 0, then X is an even number otherwise X is an odd number. Remember to use the “%” symbol to get the remainder.

PlayerID	Name
1	Karl
2	Adam
3	Anas

```
SELECT PlayerID % 2 FROM Players;
```

Correcto
Correct! This is the right syntax to evaluate whether the PlayerID is even or odd in this table.

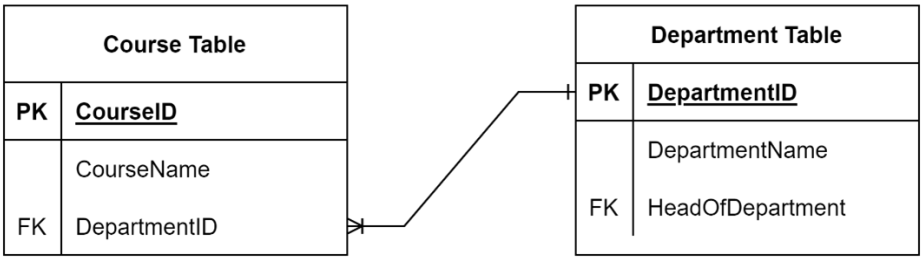
9. Write an SQL statement that outputs all names of the players in the following "Players" table who are older than 25 years of age. **1 / 1 punto**

Age	Name
38	Karl
25	Adam
22	Anas

```
SELECT Name FROM Players WHERE Age > 25;
```

Correcto
Correct! This is the right syntax to output all names of players that are older than 25 years.

10. Review the following ER-Diagram. Write the missing part of the SQL statement to define a foreign key that links the course table with the department table. **0 / 1 punto**




```
CREATE TABLE Course(
 courseID int NOT NULL, courseName VARCHAR(50), PRIMARY KEY
(courseID),
```

____ ____(____) ____ ____ (____)
);

Hint: write only the missing part in your answer.

FOREIGN KEY(departmentID) REFERENCES Department (departmentID)

Incorrecto
Not quite. Review the video ***Foreign Key*** in Module 4 Lesson 2 – Relational database design.

Part 2 - Quiz

11. What is a row of information about one specific staff member in a college database table referred to as? **1 / 1 punto**

- (●) A record
- ( ) A column
- ( ) A key

Correcto
Correct! Each row of the table will have a record of information that refers to a specific staff.

12. A sports club database includes a table called "Members" with two columns: **1 / 1 punto**

- A 'member number' column that contains the phone number of each member
- And a 'full name' column that contains the full name of each member.

Choose the right data type for each column. Select all correct answers.

- [ ] The Full name column data type is CHAR.
- [ ] The Player number column data type is DECIMAL.
- [x] The Player number column data type is INT.

Correcto
Correct! INT is the right data type for member number.

- [x] The Full name column data type is VARCHAR.

Correcto
Correct! VARCHAR is the right data type for the full name.

13. In a football club the skill level of all new players must automatically be set at the default of level 1. Which SQL syntax is used to set this default level using the DEFAULT keyword? **1 / 1 punto**

- (●) level INT DEFAULT 1;
- ( ) DEFAULT level INT 1;

Correcto
Correct! This is the right SQL syntax to set the players DEFAULT level to 1.

14. Database constraints are used to limit the type of data value that can be stored in a table. **0 / 1 punto**

- (●) False
- ( ) True

Incorrecto
Not quite. Review the video ***Default values*** in Module 2 Lesson 1 – SQL data types.

15. The output result of the following SQL statement is the data of all customers from Italy. **1 / 1 punto**

```
1   SELECT * FROM customers WHERE Country = "Italy";
```

- ( ) False
- (●) True

Correcto
Correct! The output result of this statement returns the data of all customers from Italy. The '*' symbol means all columns in the table.

16. The output result of the following SQL statement returns the records of all customers from India in Alphabetical order from A to Z. **1 / 1 punto**

```
SELECT * FROM students WHERE country = "India" ORDER BY FirstName DESC;
```

- (●) False
- ( ) True

Correcto
Correct! The output result of this SQL statement returns the records of all customers from India in reverse Alphabetical order from Z to A. This is because the DESC keyword sorts the records in a descending order.

17. What does the following SQL statement do? **1 / 1 punto**

```
SELECT * FROM Players ORDER BY Country, PlayerName;
```

- ( ) It orders the result by country and ignores the staff name.
- (●) It displays the results ordered by country first, then players name.

Correcto
Correct! It orders the result set by country first, but if some records have the same country name, it orders them by staff name.

18. The following table of data conforms with the first normal form. **1 / 1 punto**

Department ID	Department Name	Head of department	Course ID	Course Name
D1	Computing	Dr Karl	C1	Database
D1	Computing	Dr Karl	C2	Python

D1	Computing	Dr Karl	C3	Web
D1	Computing	Dr Karl	C4	Java
D2	Math	Dr Mosa	C5	Math

- (●) False
- ( ) True

Correcto
Correct! This table contains unnecessary repeating groups of data in the department ID, department name and head of department columns. These columns violate the rule of first normal form.

19. Which of the following represents the correct diagram that links the course table with the department table? **0 / 1 punto**

Diagram 1

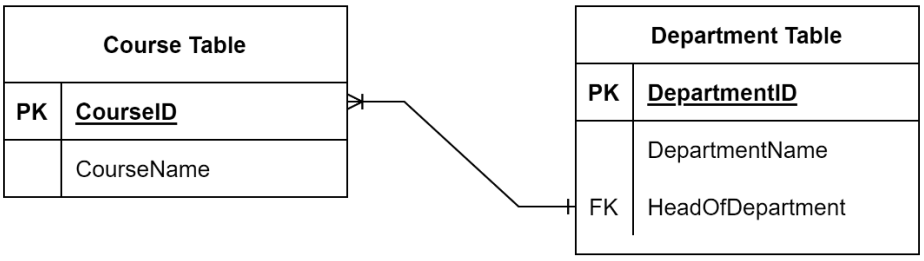
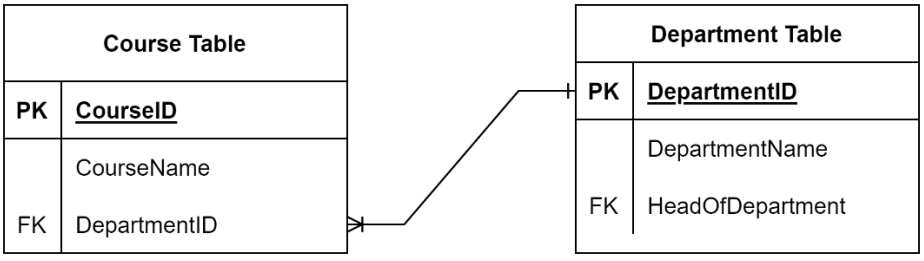


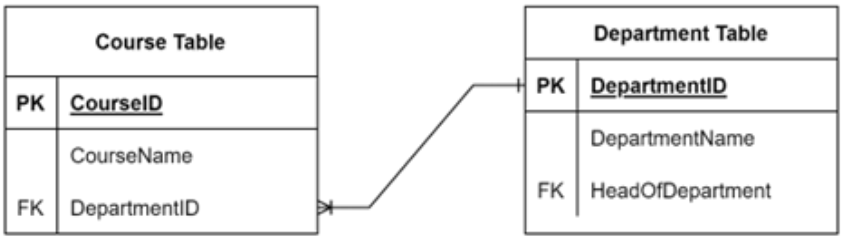
Diagram 2



- ( ) Diagram 2
- (●) Diagram 1

Incorrecto
Not quite. Review the video ***Foreign key*** in Module 4 Lesson 2 – Relational database design.

20. Identify the relationship between the tables in the diagram. **1 / 1 punto**



- ○ Many to many relationship.
- ◉ Many to one relationship.
- ○ One to one relationship.

Correcto
Correct! These diagrams show an example of a many-to-one relationship as many courses may belong to one department.