Practice problems for JDBC

1. See the `Courses` table format given below and create a `Data Definition Language` (DDL) script in SQL to create the database and table in a MySQL dbms.

courseID	courseName	courseCode	courseDuration	courseCost
1	Object-Oriented Programmiing	BCSC0002	4	9562.50
2	Object-Oriented Programming Lab	BCSC0801	4	9562.50

   Now, add this script inside a method in Java and execute it. Write logic to confirm whether this query ran and then show the result to the user.

2. Write a method named `public boolean addNewCourseInDatabase(Connection connection, Course course)` to add a new course in the database.
3. Write a method named `public void readAllCourseDetailsFromDatabase(Connection connection)` which will read all the details from the database and then print them to the user.
4. The PreparedStatement class has an `executeQuery` method for executing `SELECT` statements. Write a method to use a PreparedStatement to query individual courses based on their names.
5. Write a method to fetch all the details of the courses from the courses table and store it to an ArrayList of courses.
6. Write a method to delete a particular course from the courses table.
7. Write a query to update the courseCode value of either of the course, take the name of the course from the user an input, then search whether the couse is present in the table, if present, then ask the user which column they would like to update, based on their answer, update the column with the value they provide and then show them the updated record.
8. Create a method named `public void randomCoursesAddingMethod(int numberOfCoursesToAdd)` that would take a number as input and automatically add that many courses to the database. The name of the courses should be random but actual course names. Randomly generate course codes, course duration in months and the fees for the records.