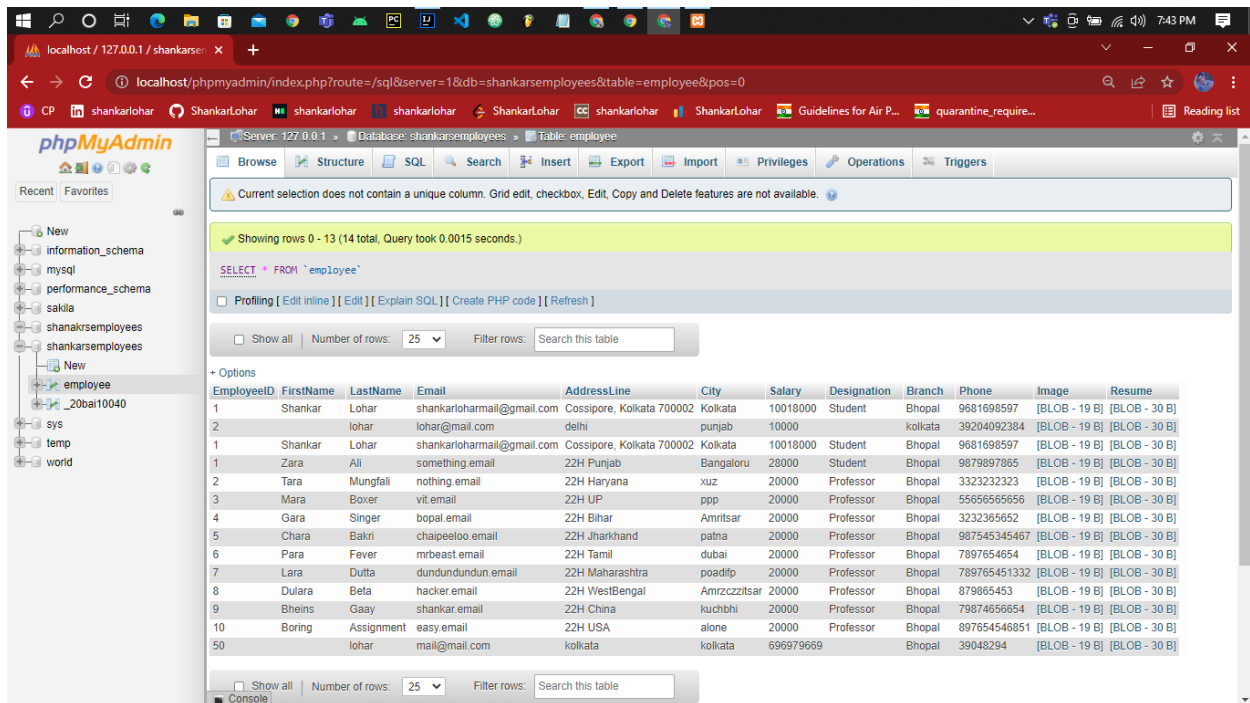


20BAI10040 SHANKAR LOHAR

Link to Code here -

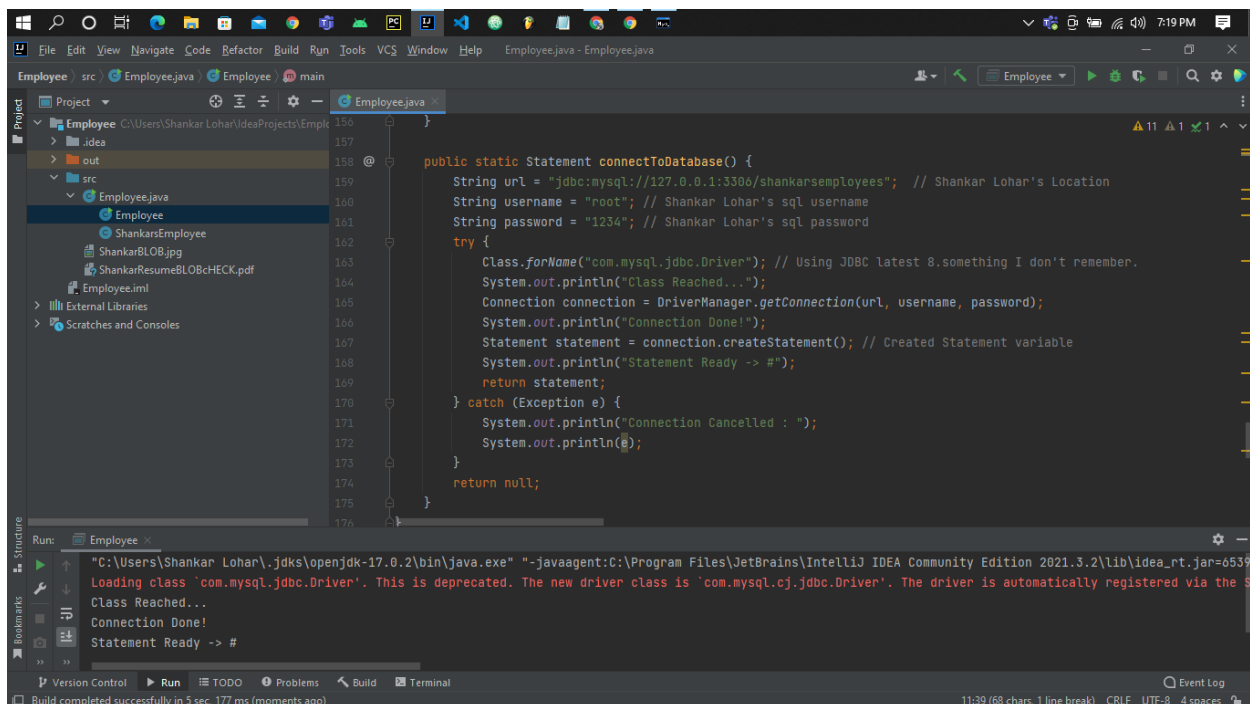
<https://github.com/ShankarLohar/EmployeeManagementUsingSqlBLOBxampOOPS>

Output Screenshots Exercise 9 and Tutorial



The screenshot shows the phpMyAdmin interface for a MySQL database named 'shankarsemployees'. The 'employee' table is selected, and the 'Table' tab is active. The table structure is displayed, showing columns: EmployeeID, FirstName, LastName, Email, AddressLine, City, Salary, Designation, Branch, Phone, Image, and Resume. The table contains 14 rows of data. The first row is highlighted in yellow.

EmployeeID	FirstName	LastName	Email	AddressLine	City	Salary	Designation	Branch	Phone	Image	Resume
1	Shankar	Lohar	shankarloharmail@gmail.com	Cossipore, Kolkata 700002	Kolkata	10018000	Student	Bhopal	9681698597	[BLOB - 19 B]	[BLOB - 30 B]
2	lohar	lohar	lohar@mail.com	delhi	punjab	10000		kolkata	39204092384	[BLOB - 19 B]	[BLOB - 30 B]
1	Shankar	Lohar	shankarloharmail@gmail.com	Cossipore, Kolkata 700002	Kolkata	10018000	Student	Bhopal	9681698597	[BLOB - 19 B]	[BLOB - 30 B]
1	Zara	Ali	something_email	22H Punjab	Bangaluru	28000	Student	Bhopal	9879897865	[BLOB - 19 B]	[BLOB - 30 B]
2	Tara	Mungfali	nothing_email	22H Haryana	xuz	20000	Professor	Bhopal	3323232323	[BLOB - 19 B]	[BLOB - 30 B]
3	Mara	Boxer	vit_email	22H UP	ppp	20000	Professor	Bhopal	5565656565	[BLOB - 19 B]	[BLOB - 30 B]
4	Gara	Singer	bopal_email	22H Bihar	Amritsar	20000	Professor	Bhopal	3232365652	[BLOB - 19 B]	[BLOB - 30 B]
5	Chara	Bakri	chaipeeloo_email	22H Jharkhand	patna	20000	Professor	Bhopal	987545345467	[BLOB - 19 B]	[BLOB - 30 B]
6	Para	Fever	mrbeast_email	22H Tamil	dubai	20000	Professor	Bhopal	7897654654	[BLOB - 19 B]	[BLOB - 30 B]
7	Lara	Dutta	dundundundund_email	22H Maharashtra	poadip	20000	Professor	Bhopal	789765451332	[BLOB - 19 B]	[BLOB - 30 B]
8	Dulara	Beta	hacker_email	22H WestBengal	Amrzczztsar	20000	Professor	Bhopal	879865453	[BLOB - 19 B]	[BLOB - 30 B]
9	Bheins	Gaay	shankar_email	22H China	kuchbhi	20000	Professor	Bhopal	79874656654	[BLOB - 19 B]	[BLOB - 30 B]
10	Boring	Assignment	easy_email	22H USA	alone	20000	Professor	Bhopal	897654546851	[BLOB - 19 B]	[BLOB - 30 B]
50	lohar	mail@mail.com	kolkata	kolkata	kolkata	696979669		Bhopal	39048294	[BLOB - 19 B]	[BLOB - 30 B]



The screenshot shows the IntelliJ IDEA IDE with the 'Employee.java' file open. The code defines a static method 'connectToDatabase()' that attempts to establish a JDBC connection to a MySQL database. The output window at the bottom shows the execution results, indicating that the connection was successful.

```
public static Statement connectToDatabase() {
    String url = "jdbc:mysql://127.0.0.1:3306/shankarsemployees"; // Shankar Lohar's Location
    String username = "root"; // Shankar Lohar's sql username
    String password = "1234"; // Shankar Lohar's sql password
    try {
        Class.forName("com.mysql.jdbc.Driver"); // Using JDBC latest 8.something I don't remember.
        System.out.println("Class Reached...");
        Connection connection = DriverManager.getConnection(url, username, password);
        System.out.println("Connection Done!");
        Statement statement = connection.createStatement(); // Created Statement variable
        System.out.println("Statement Ready -> #");
        return statement;
    } catch (Exception e) {
        System.out.println("Connection Cancelled : ");
        System.out.println(e);
    }
    return null;
}
```

Run: Employee

"C:\Users\Shankar Lohar\jdk\openjdk-17.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.3.2\lib\idea_rt.jar=6539" "C:\Users\Shankar Lohar\IdeaProjects\EmployeeManagementUsingSqlBLOBxampOOPS\out\production\EmployeeManagementUsingSqlBLOBxampOOPS" -Dfile.encoding=UTF-8

Loading class 'com.mysql.jdbc.Driver'. This is deprecated. The new driver class is 'com.mysql.cj.jdbc.Driver'. The driver is automatically registered via the service provider configuration.

Class Reached...

Connection Done!

Statement Ready -> #

The screenshot shows an IDE with a project named 'Employee'. The 'src' folder contains 'Employee.java'. The 'Run' console shows the output of the program. The code in 'Employee.java' includes a method 'showTables' that connects to a database, executes a query to show tables, and prints the results.

```
143 System.out.println("THE DATABASE " + databaseCheck + " DOES NOT EXISTS!");
144 }
145
146 @
147 private static void showTables(Statement statement) throws SQLException {
148     ResultSet tableList = statement.executeQuery(sql: "Show tables");
149     System.out.println("\n\n ##### Showing Tables in the Current Database ##### ");
150     int dataRecords = 0;
151     while (tableList.next()) {
152         System.out.print(tableList.getString( columnIndex: 1));
153         dataRecords++;
154         System.out.println();
155     }
156     System.out.println("\nTHERE ARE " + dataRecords + " TABLES CURRENTLY IN THE DATABASE!\n");
157 }
```

Run: Employee
Connection Done!
Statement Ready -> #

Showing Tables in the Current Database #####
_20bai10040
shankarlohar

THERE ARE 2 TABLES CURRENTLY IN THE DATABASE!

Process finished with exit code 0

The screenshot shows the same IDE with the 'Employee' project. The 'Run' console shows the output of the program. The code in 'Employee.java' includes a method 'checkDatabase' that connects to a database, executes a query to show databases, and prints the results.

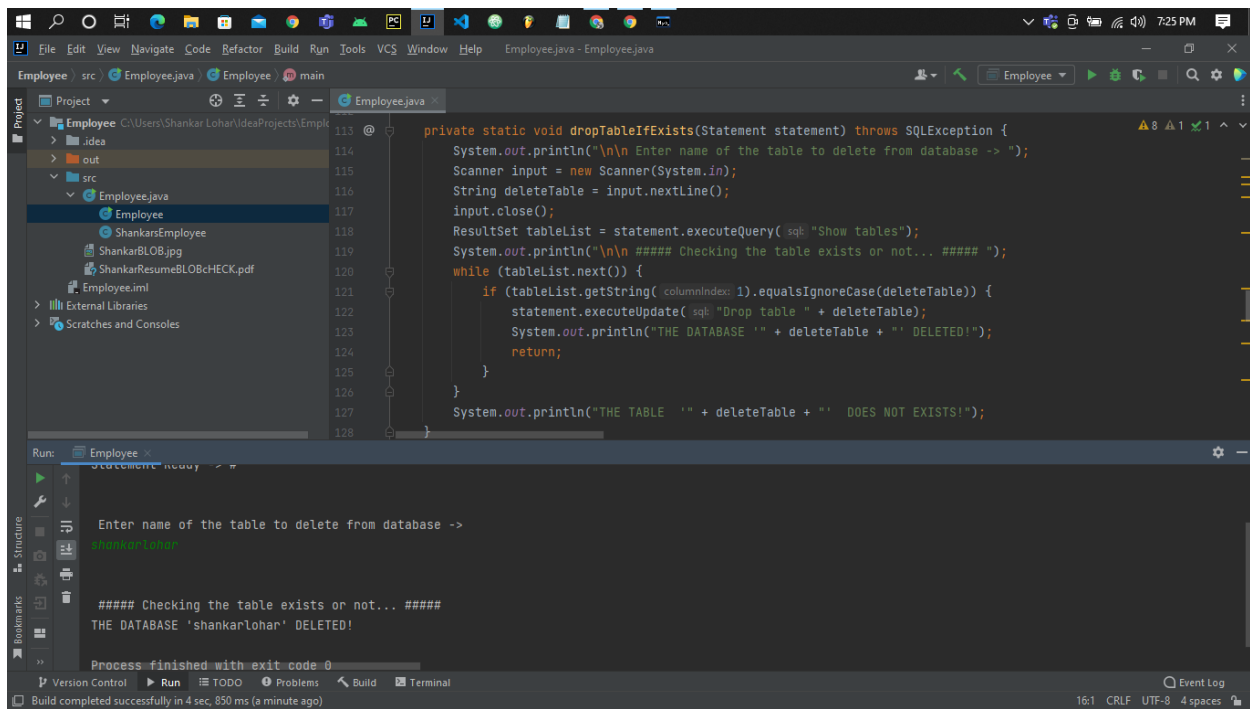
```
130 private static void checkDatabase(Statement statement) throws SQLException {
131     System.out.println("\n\n Enter name of the database to check -> ");
132     Scanner input = new Scanner(System.in);
133     String databaseCheck = input.nextLine();
134     input.close();
135     ResultSet databaseList = statement.executeQuery( sql: "Show databases");
136     System.out.println("\n\n ##### Checking the database exists or not... ##### ");
137     while (databaseList.next()) {
138         if (databaseList.getString( columnIndex: 1).equalsIgnoreCase(databaseCheck)) {
139             System.out.println("THE DATABASE " + databaseCheck + " EXISTS!");
140             return;
141         }
142     }
143     System.out.println("THE DATABASE " + databaseCheck + " DOES NOT EXISTS!");
144 }
```

Run: Employee
Connection Done!
Statement Ready -> #

Enter name of the database to check ->
shankarsemployees

Checking the database exists or not... #####
THE DATABASE 'shankarsemployees' EXISTS!

Process finished with exit code 0



```
private static void dropTableIfExists(Statement statement) throws SQLException {
    System.out.println("\n\n Enter name of the table to delete from database -> ");
    Scanner input = new Scanner(System.in);
    String deleteTable = input.nextLine();
    input.close();
    ResultSet tableList = statement.executeQuery(sql: "Show tables");
    System.out.println("\n\n ##### Checking the table exists or not... ##### ");
    while (tableList.next()) {
        if (tableList.getString( columnIndex: 1).equalsIgnoreCase(deleteTable)) {
            statement.executeUpdate( sql: "Drop table " + deleteTable);
            System.out.println("THE DATABASE '" + deleteTable + "' DELETED!");
            return;
        }
    }
    System.out.println("THE TABLE '" + deleteTable + "' DOES NOT EXISTS!");
}
```

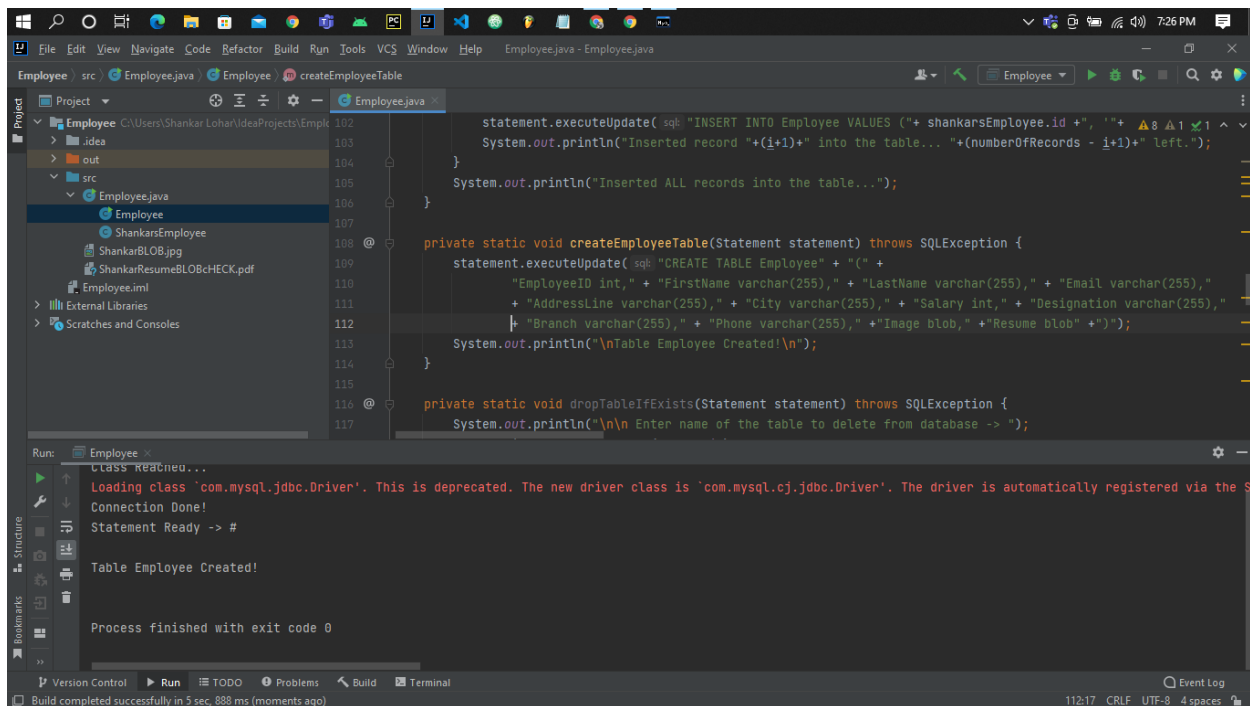
Run: Employee

Enter name of the table to delete from database ->
shankarlohan

Checking the table exists or not... #####
THE DATABASE 'shankarlohan' DELETED!

Process finished with exit code 0

Build completed successfully in 4 sec, 850 ms (a minute ago)



```
private static void createEmployeeTable(Statement statement) throws SQLException {
    statement.executeUpdate( sql: "CREATE TABLE Employee" + "(" +
        "EmployeeID int," + "FirstName varchar(255)," + "LastName varchar(255)," + "Email varchar(255),"
        + "AddressLine varchar(255)," + "City varchar(255)," + "Salary int," + "Designation varchar(255),"
        + "Branch varchar(255)," + "Phone varchar(255)," + "Image blob," + "Resume blob" + ")" );
    System.out.println("\nTable Employee Created!\n");
}
```

Run: Employee

Class Reached...

Loading class 'com.mysql.jdbc.Driver'. This is deprecated. The new driver class is 'com.mysql.cj.jdbc.Driver'. The driver is automatically registered via the ServiceLoader mechanism. In future releases, this mechanism will be replaced by DriverRegistration which is safer. However, since this mechanism has been around for long, you are allowed to use the old mechanism (which is also in the deprecated class) for backwards compatibility.

Connection Done!

Statement Ready -> #

Table Employee Created!

Process finished with exit code 0

Build completed successfully in 5 sec, 888 ms (moments ago)

```
File Edit View Navigate Code Refactor Build Run Tools VCS Window Help Employee.java - Employee.java
Employee src Employee.java Employee insert10Employees
Project Employee.java
Run: Employee
Enter the employee id -> 50
Enter the employee first name -> Zara
Enter the employee last name -> Ali
Enter the employee email -> something.email
Enter the employee address -> 22H Punjab
Enter the employee city -> Bangaluru
Enter the employee salary -> 10000
Enter the employee designation -> Professor
Enter the employee branch -> Bhopal
Enter the employee phone -> 9879897865
Enter the employee image path -> src/ShankarBLOB.jpg
Enter the employee resume PDF path -> src/ShankarResumeBLOBcHECK.pdf
Inserting records into the table...
Inserted record 1 into the table... 0 left.
Inserted ALL records into the table...

Process finished with exit code 0
Version Control Run TODO Problems Build Terminal
Build completed successfully in 4 sec, 290 ms (2 minutes ago) 35:1 CRLF UTF-8 4 spaces
```

```
File Edit View Navigate Code Refactor Build Run Tools VCS Window Help Employee.java - Employee.java
Employee src Employee.java Employee main
Project Employee.java
Run: Employee
1 Shankar Lohar ShankarLohar@mail.com 22H Punjab Bangaluru 10000 Professor Bhopal 9879897865 src/ShankarBLOB.jpg src/ShankarResumeBLOBcHECK.pdf
2 Zara Ali something.email 22H Haryana xuz 10000 Professor Bhopal 3323232323 src/ShankarBLOB.jpg src/ShankarResumeBLOBcHECK.pdf
3 Mara Boxer vit.email 22H UP ppp 10000 Professor Bhopal 5565656565 src/ShankarBLOB.jpg src/ShankarResumeBLOBcHECK.pdf
4 Gara Singer bopal.email 22H Bihar Amritsar 10000 Professor Bhopal 3232365652 src/ShankarBLOB.jpg src/ShankarResumeBLOBcHECK.pdf
5 Chara Bakri chaipooloo.email 22H Jharkhand patna 10000 Professor Bhopal 987545345467 src/ShankarBLOB.jpg src/ShankarResumeBLOBcHECK.pdf
6 Para Fever mrbeast.email 22H Tamil dubai 10000 Professor Bhopal 7897654654 src/ShankarBLOB.jpg src/ShankarResumeBLOBcHECK.pdf
7 Lara Dutta dundundundun.email 22H Maharashtra poadifp 10000 Professor Bhopal 789765451332 src/ShankarBLOB.jpg src/ShankarResumeBLOBcHECK.pdf
8 Dulara Beta hacker.email 22H WestBengal Amrczzitsar 10000 Professor Bhopal 879865453 src/ShankarBLOB.jpg src/ShankarResumeBLOBcHECK.pdf
9 Bheins Gaay shankar.email 22H China kuchbhi 10000 Professor Bhopal 79874656654 src/ShankarBLOB.jpg src/ShankarResumeBLOBcHECK.pdf
10 Boring Assignment easy.email 22H USA alone 10000 Professor Bhopal 897654546851 src/ShankarBLOB.jpg src/ShankarResumeBLOBcHECK.pdf
50 Lohar mail@mail.com kolkata kolkata 696969669 Bhopal 39048294 src/ShankarBLOB.jpg src/ShankarResumeBLOBcHECK.pdf

THERE ARE 14 TABLES CURRENTLY IN THE DATABASE!
Version Control Run TODO Problems Build Terminal
Build completed successfully in 4 sec, 29 ms (moments ago) 23:44 CRLF UTF-8 4 spaces
```

Employee.java - Employee.java

Run: Employee

```
Statement Ready -> #

##### Showing Records in the Current Table #####
```

id	firstname	lastname	email	address	city	salary	designation	branch	phoneNo	image	resume
1	Shankar	Lohar	shankarloharmail@gmail.com	Cossipore, Kolkata	700002	Kolkata	10000000	Developer	Bhopal	9681698597	src/S
2	Lohar	lohar@mail.com	delhi	punjab	10000	kolokata	39204092384	src/ShankarBLOB.jpg	src/ShankarResumeBLOBcHECK.pdf		
1	Shankar	Lohar	shankarloharmail@gmail.com	Cossipore, Kolkata	700002	Kolkata	10000000	Developer	Bhopal	9681698597	src/S
1	Zara	Ali	something.email	22H Punjab	Bangaloru	10000	Professor	Bhopal	9879897865	src/ShankarBLOB.jpg	src/ShankarRe
2	Tara	Mungfali	nothing.email	22H Haryana	xuz	10000	Professor	Bhopal	3323232323	src/ShankarBLOB.jpg	src/ShankarResu
3	Mara	Boxer	vit.email	22H UP	ppp	10000	Professor	Bhopal	55656565656	src/ShankarBLOB.jpg	src/ShankarResumeBLOBcHECK
4	Gara	Singer	bopal.email	22H Bihar	Amritsar	10000	Professor	Bhopal	3232365652	src/ShankarBLOB.jpg	src/ShankarResum
5	Chara	Bakri	chaapeeloo.email	22H Jharkhand	patna	10000	Professor	Bhopal	987545345467	src/ShankarBLOB.jpg	src/Shan
6	Para	Fever	mrbeast.email	22H Tamil	dubai	10000	Professor	Bhopal	7897654654	src/ShankarBLOB.jpg	src/ShankarResumeB
7	Lara	Dutta	dundundundun.email	22H Maharashtra	poadifp	10000	Professor	Bhopal	789765451332	src/ShankarBLOB.jpg	src

Build completed successfully in 4 sec, 29 ms (a minute ago)

Employee.java - Employee.java

Run: Employee

```
private static void modifySalaryDesignation(Statement statement) throws SQLException {
    System.out.println("\nEnter employee id to update salary and designation -> ");
    Scanner empIdScanner = new Scanner(System.in);
    int id = empIdScanner.nextInt();
    empIdScanner.close();
    statement.executeUpdate("UPDATE Employee SET Designation = 'Student', Salary = Salary + 8000 WHERE Employee.id = " + id);
    System.out.println("\nEmployee " + id + "'s Salary and Designation Updated!\n");
}

private static void showEmployeeRecords(Statement statement) throws SQLException {
    int noOfRecords = 0;
}
```

Run: Employee

```
"C:\Users\Shankar Lohar\jdk\openjdk-17.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.3.2\lib\idea_rt.jar=6551:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.3.2\bin" -Dfile.encoding=UTF-8
Loading class 'com.mysql.jdbc.Driver'. This is deprecated. The new driver class is 'com.mysql.cj.jdbc.Driver'. The driver is automatically registered via the ServiceLoader mechanism.
Class Reached...
Connection Done!
Statement Ready -> #

Enter employee id to update salary and designation ->
1

Employee 1's Salary and Designation Updated!

Process finished with exit code 0
```

Build completed successfully in 4 sec, 415 ms (moments ago)

