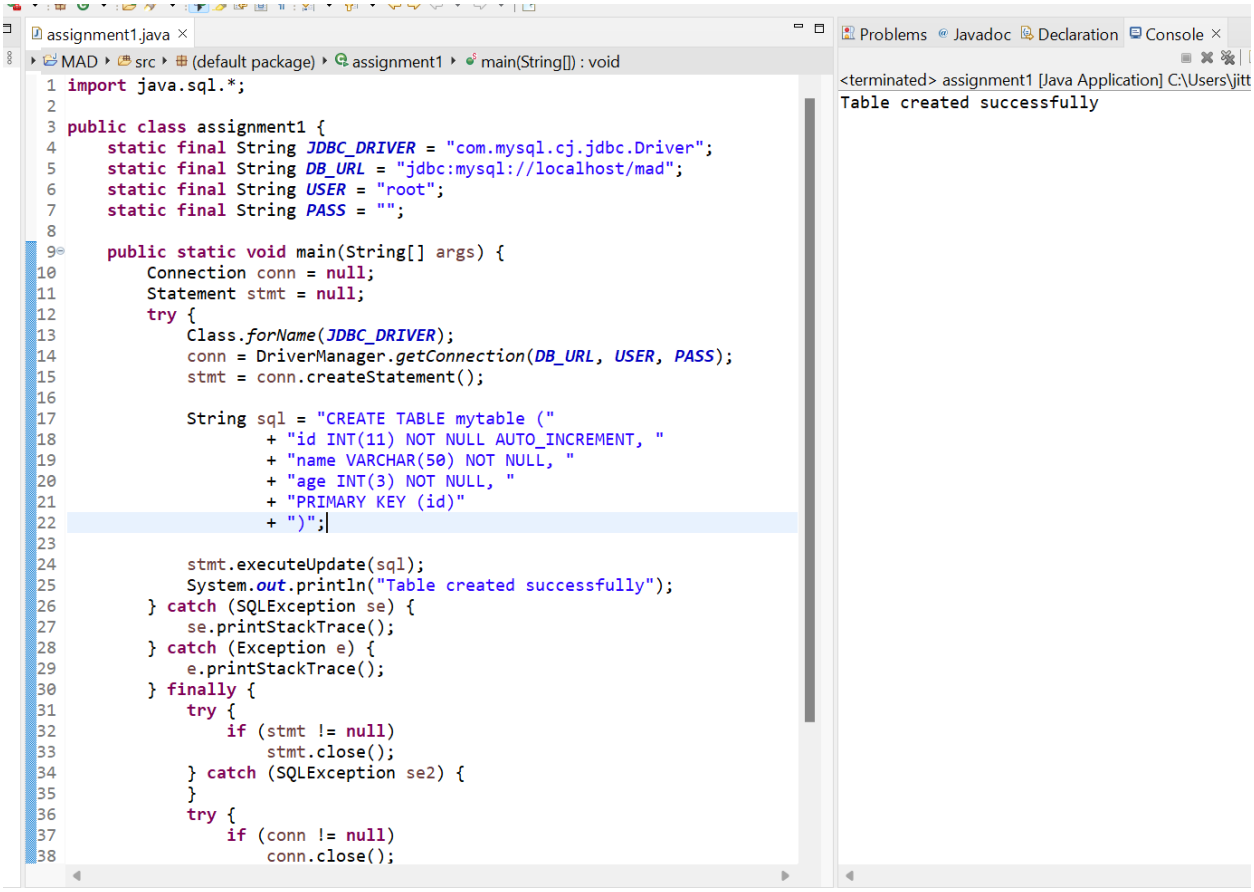
Assignment -3

Implement java assignment for java JDBC using java

Creating table into database using Java JDBC:

```
import java.sql.*;

public class assignment1 {
    static final String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";
    static final String DB_URL = "jdbc:mysql://localhost/mad";
    static final String USER = "root";
    static final String PASS = "";

    public static void main(String[] args) {
        Connection conn = null;
        Statement stmt = null;
        try {
            Class.forName(JDBC_DRIVER);
            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            stmt = conn.createStatement();

            String sql = "CREATE TABLE mytable ("
                    + "id INT(11) NOT NULL AUTO_INCREMENT, "
                    + "name VARCHAR(50) NOT NULL, "
                    + "age INT(3) NOT NULL, "
                    + "PRIMARY KEY (id)"
                    + ")";

            stmt.executeUpdate(sql);
            System.out.println("Table created successfully");
        } catch (SQLException se) {
            se.printStackTrace();
        } catch (Exception e) {
            e.printStackTrace();
        } finally {
            try {
                if (stmt != null)
                    stmt.close();
            } catch (SQLException se2) {
            }
            try {
                if (conn != null)
                    conn.close();
            } catch (SQLException se) {
                se.printStackTrace();
            }
        }
    }
}
```

OUTPUT :-



assignment1.java

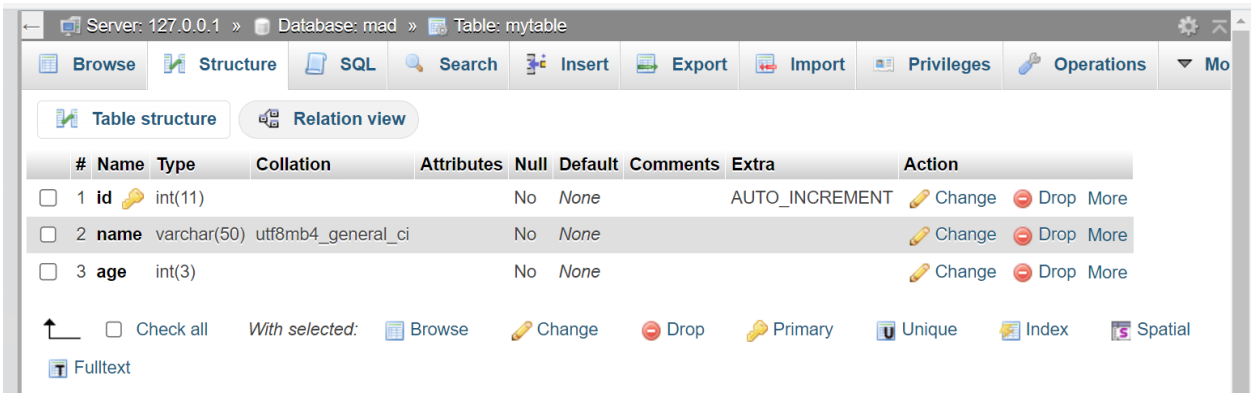
MAD ▸ src ▸ (default package) ▸ assignment1 ▸ main(String[]) : void

```
1  import java.sql.*;
2
3  public class assignment1 {
4      static final String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";
5      static final String DB_URL = "jdbc:mysql://localhost/mad";
6      static final String USER = "root";
7      static final String PASS = "";
8
9      public static void main(String[] args) {
10         Connection conn = null;
11         Statement stmt = null;
12         try {
13             Class.forName(JDBC_DRIVER);
14             conn = DriverManager.getConnection(DB_URL, USER, PASS);
15             stmt = conn.createStatement();
16
17             String sql = "CREATE TABLE mytable ("
18                     + "id INT(11) NOT NULL AUTO_INCREMENT, "
19                     + "name VARCHAR(50) NOT NULL, "
20                     + "age INT(3) NOT NULL, "
21                     + "PRIMARY KEY (id)"
22                     + ")";
23
24             stmt.executeUpdate(sql);
25             System.out.println("Table created successfully");
26         } catch (SQLException se) {
27             se.printStackTrace();
28         } catch (Exception e) {
29             e.printStackTrace();
30         } finally {
31             try {
32                 if (stmt != null)
33                     stmt.close();
34             } catch (SQLException se2) {
35             }
36             try {
37                 if (conn != null)
38                     conn.close();
```

Problems | Javadoc | Declaration | Console

<terminated> assignment1 [Java Application] C:\Users\jitt

```
Table created successfully
```



Server: 127.0.0.1 » Database: mad » Table: mytable

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Mo

Table structure | Relation view

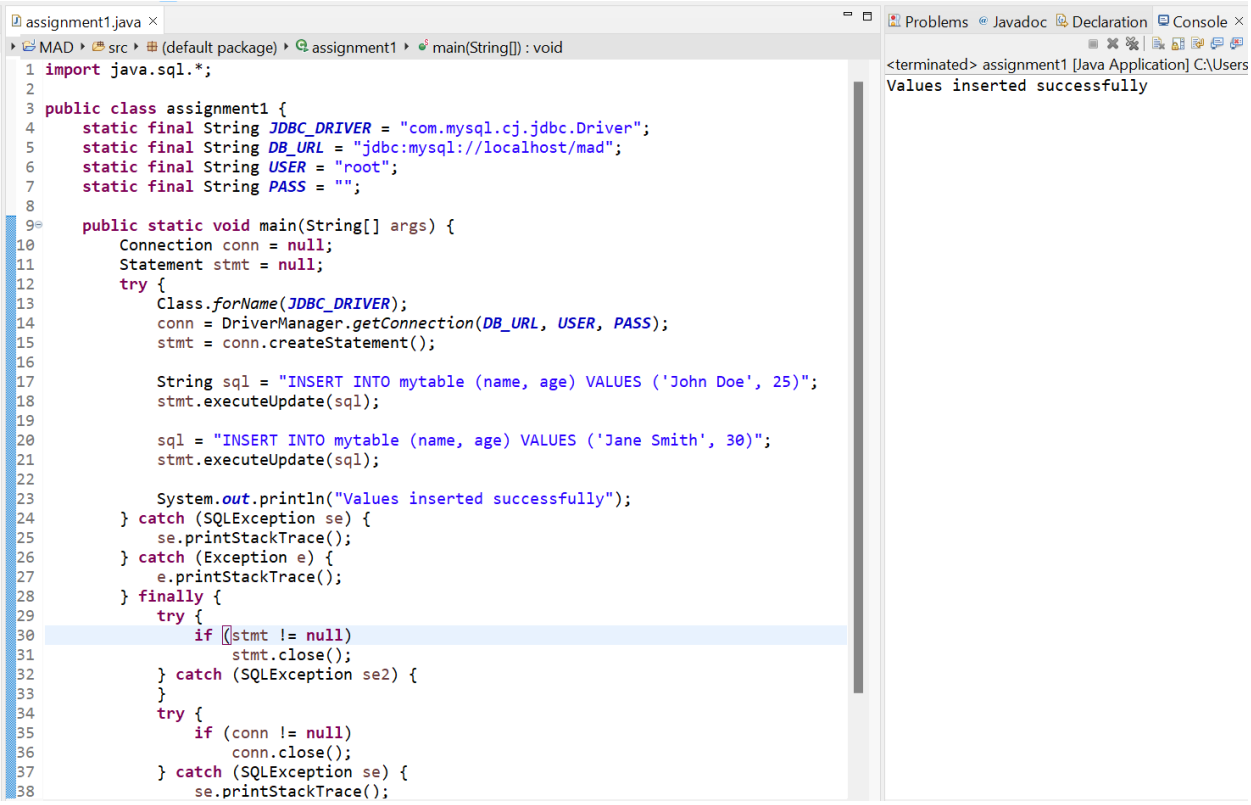
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(11)			No	None		AUTO_INCREMENT	Change Drop More
2	name	varchar(50)	utf8mb4_general_ci		No	None			Change Drop More
3	age	int(3)			No	None			Change Drop More

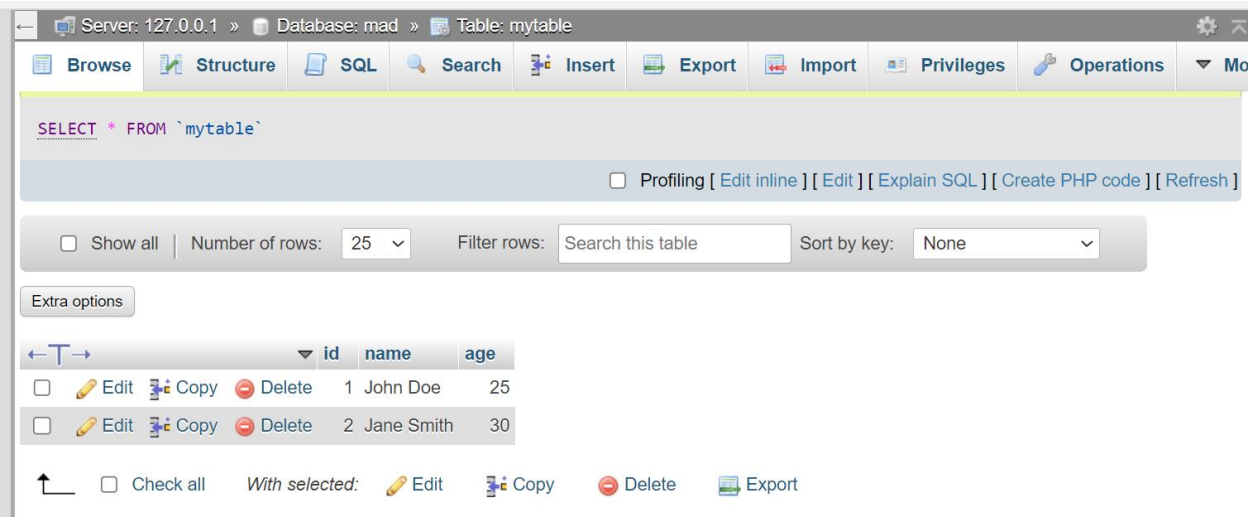
Check all | With selected: Browse | Change | Drop | Primary | Unique | Index | Spatial | Fulltext

Inserting values into table using Java JDBC :

```
import java.sql.*;

public class assignment1 {
    static final String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";
    static final String DB_URL = "jdbc:mysql://localhost/mad";
    static final String USER = "root";
    static final String PASS = "";

    public static void main(String[] args) {
        Connection conn = null;
        Statement stmt = null;
        try {
            Class.forName(JDBC_DRIVER);
            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            stmt = conn.createStatement();

            String sql = "INSERT INTO mytable (name, age) VALUES ('John Doe', 25)";
            stmt.executeUpdate(sql);

            sql = "INSERT INTO mytable (name, age) VALUES ('Jane Smith', 30)";
            stmt.executeUpdate(sql);

            System.out.println("Values inserted successfully");
        } catch (SQLException se) {
            se.printStackTrace();
        } catch (Exception e) {
            e.printStackTrace();
        } finally {
            try {
                if (stmt != null)
                    stmt.close();
            } catch (SQLException se2) {
            }
            try {
                if (conn != null)
                    conn.close();
            } catch (SQLException se) {
                se.printStackTrace();
            }
        }
    }
}
```

OUTPUT :-


assignment1.java
MAD ▸ src ▸ (default package) ▸ assignment1 ▸ main(String[]) : void
1 import java.sql.*;
2
3 public class assignment1 {
4 static final String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";
5 static final String DB_URL = "jdbc:mysql://localhost/mad";
6 static final String USER = "root";
7 static final String PASS = "";
8
9 public static void main(String[] args) {
10 Connection conn = null;
11 Statement stmt = null;
12 try {
13 Class.forName(JDBC_DRIVER);
14 conn = DriverManager.getConnection(DB_URL, USER, PASS);
15 stmt = conn.createStatement();
16
17 String sql = "INSERT INTO mytable (name, age) VALUES ('John Doe', 25)";
18 stmt.executeUpdate(sql);
19
20 sql = "INSERT INTO mytable (name, age) VALUES ('Jane Smith', 30)";
21 stmt.executeUpdate(sql);
22
23 System.out.println("Values inserted successfully");
24 } catch (SQLException se) {
25 se.printStackTrace();
26 } catch (Exception e) {
27 e.printStackTrace();
28 } finally {
29 try {
30 if (stmt != null)
31 stmt.close();
32 } catch (SQLException se2) {
33 }
34 try {
35 if (conn != null)
36 conn.close();
37 } catch (SQLException se) {
38 se.printStackTrace();
Problems Javadoc Declaration Console
<terminated> assignment1 [Java Application] C:\Users
Values inserted successfully

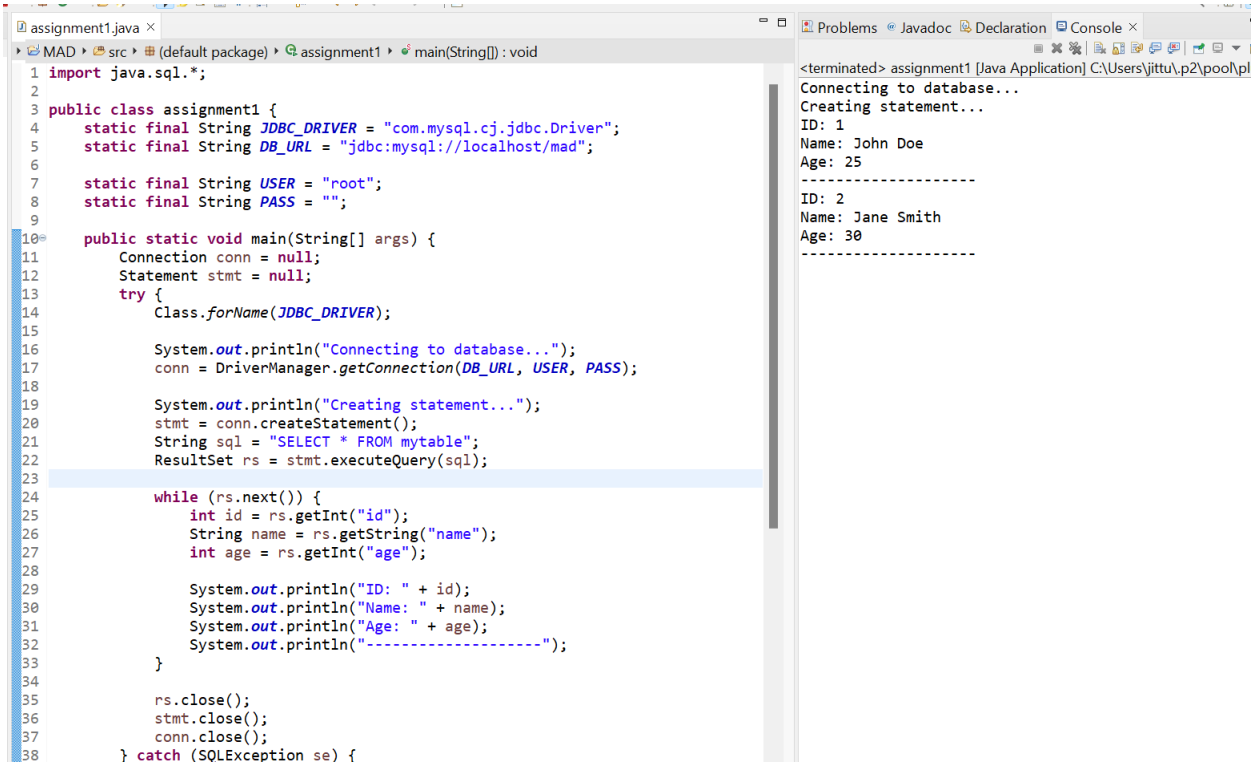

Server: 127.0.0.1 » Database: mad » Table: mytable
Browse Structure SQL Search Insert Export Import Privileges Operations Mo
SELECT * FROM `mytable`
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
Extra options
id name age
Edit Copy Delete 1 John Doe 25
Edit Copy Delete 2 Jane Smith 30
Check all With selected: Edit Copy Delete Export

Displaying the table in the database using Java JDBC :

```
import java.sql.*;

public class assignment1 {
    static final String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";
    static final String DB_URL = "jdbc:mysql://localhost/mad";

    static final String USER = "root";
    static final String PASS = "";

    public static void main(String[] args) {
        Connection conn = null;
        Statement stmt = null;
        try {
            Class.forName(JDBC_DRIVER);

            System.out.println("Connecting to database...");
            conn = DriverManager.getConnection(DB_URL, USER, PASS);

            System.out.println("Creating statement...");
            stmt = conn.createStatement();
            String sql = "SELECT * FROM mytable";
            ResultSet rs = stmt.executeQuery(sql);

            while (rs.next()) {
                int id = rs.getInt("id");
                String name = rs.getString("name");
                int age = rs.getInt("age");

                System.out.println("ID: " + id);
                System.out.println("Name: " + name);
                System.out.println("Age: " + age);
                System.out.println("--------------------");
            }

            rs.close();
            stmt.close();
            conn.close();
        } catch (SQLException se) {
            se.printStackTrace();
        } catch (Exception e) {
            e.printStackTrace();
        } finally {
            try {
                if (stmt != null) stmt.close();
            } catch (SQLException se2) {
                se2.printStackTrace();
            }
            try {
                if (conn != null) conn.close();
            } catch (SQLException se) {
                se.printStackTrace();
            }
```

```
        }
    }
}
```

OUTPUT: -



assignment1.java

MAD ▸ src ▸ (default package) ▸ assignment1 ▸ main(String[]) : void

```
1  import java.sql.*;
2
3  public class assignment1 {
4      static final String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";
5      static final String DB_URL = "jdbc:mysql://localhost/mad";
6
7      static final String USER = "root";
8      static final String PASS = "";
9
10     public static void main(String[] args) {
11         Connection conn = null;
12         Statement stmt = null;
13         try {
14             Class.forName(JDBC_DRIVER);
15
16             System.out.println("Connecting to database...");
17             conn = DriverManager.getConnection(DB_URL, USER, PASS);
18
19             System.out.println("Creating statement...");
20             stmt = conn.createStatement();
21             String sql = "SELECT * FROM mytable";
22             ResultSet rs = stmt.executeQuery(sql);
23
24             while (rs.next()) {
25                 int id = rs.getInt("id");
26                 String name = rs.getString("name");
27                 int age = rs.getInt("age");
28
29                 System.out.println("ID: " + id);
30                 System.out.println("Name: " + name);
31                 System.out.println("Age: " + age);
32                 System.out.println("--------------------");
33             }
34
35             rs.close();
36             stmt.close();
37             conn.close();
38         } catch (SQLException se) {
```

Problems | Javadoc | Declaration | Console

```
<terminated> assignment1 [Java Application] C:\Users\jittu\.p2\pool\pl
Connecting to database...
Creating statement...
ID: 1
Name: John Doe
Age: 25
--------------------
ID: 2
Name: Jane Smith
Age: 30
--------------------
```