



MODERN APPLICATION DEVELOPMENT (JAVA SPRINGBOOT)

Assignment 3 for SMARTBRIDGE externship program



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1) Connection of Java Data Base Connectivity (JDBC) Driver to the Java Eclipse IDE.

Code:

```
import java.sql.DriverManager;
import java.sql.Connection;

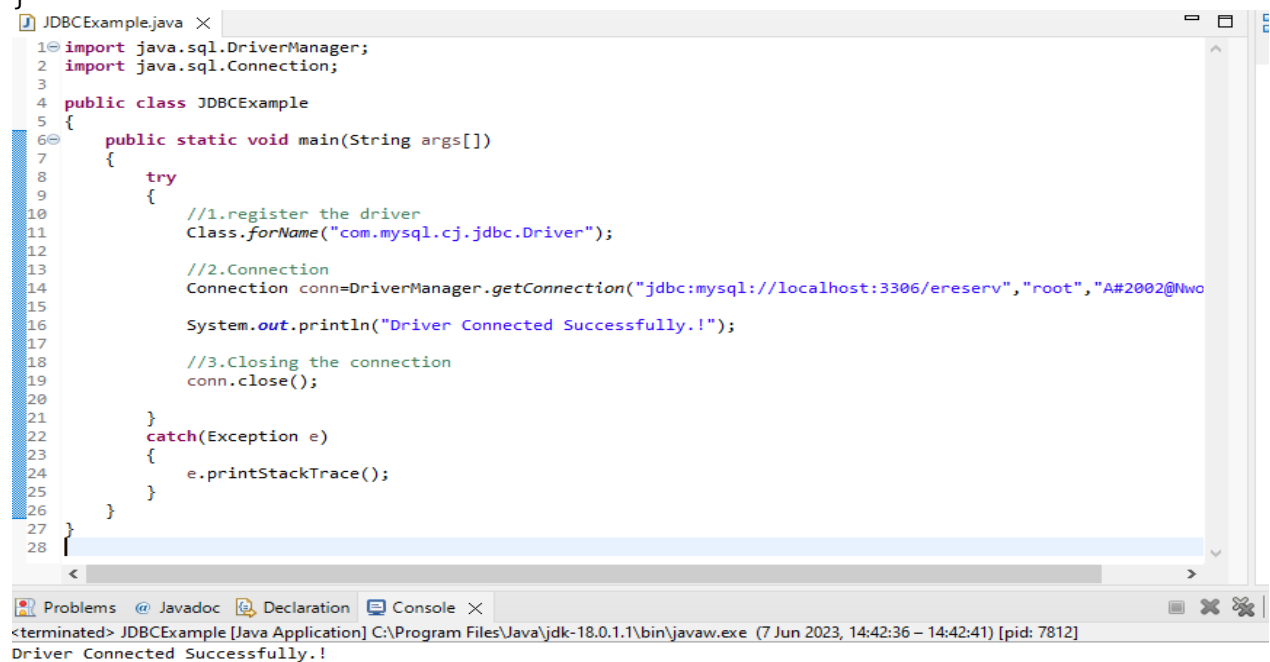
public class JDBCExample
{
    public static void main(String args[])
    {
        try
        {
            //1.register the driver
            Class.forName("com.mysql.cj.jdbc.Driver");

            //2.Connection
            Connection
            conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/ereserv","root","A#2002@NwoK277&");

            System.out.println("Driver Connected Successfully.!");

            //3.Closing the connection
            conn.close();

        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
}
```



The screenshot displays the Eclipse IDE interface. The main editor window shows the 'JDBCExample.java' file, which contains the same Java code as the previous block. The code is syntax-highlighted, with imports in purple, keywords in red, and comments in green. The IDE's interface includes a top toolbar, a left sidebar with project and package explorers, and a bottom toolbar with tabs for 'Problems', 'Javadoc', 'Declaration', and 'Console'. The 'Console' tab is active, showing the output of the program: '<terminated> JDBCExample [Java Application] C:\Program Files\Java\jdk-18.0.1.1\bin\javaw.exe (7 Jun 2023, 14:42:36 – 14:42:41) [pid: 7812] Driver Connected Successfully.!'.

```
1 import java.sql.DriverManager;
2 import java.sql.Connection;
3
4 public class JDBCExample
5 {
6     public static void main(String args[])
7     {
8         try
9         {
10             //1.register the driver
11             Class.forName("com.mysql.cj.jdbc.Driver");
12
13             //2.Connection
14             Connection conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/ereserv","root","A#2002@NwoK277&");
15
16             System.out.println("Driver Connected Successfully.!");
17
18             //3.Closing the connection
19             conn.close();
20
21         }
22         catch(Exception e)
23         {
24             e.printStackTrace();
25         }
26     }
27 }
28
```

<terminated> JDBCExample [Java Application] C:\Program Files\Java\jdk-18.0.1.1\bin\javaw.exe (7 Jun 2023, 14:42:36 – 14:42:41) [pid: 7812]
Driver Connected Successfully.!

2.Insertion of data to database using java IDE.

	PNRno	Pname	P_Age
▶	1123456782	Rajan	42
*	NULL	NULL	NULL

Before Insertion.

```
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.Connection;

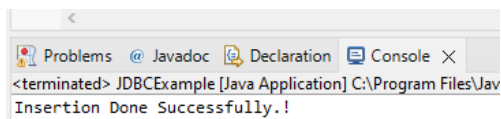
public class JDBCExample
{
    public static void main(String args[])
    {
        try
        {
            //1.register the driver
            Class.forName("com.mysql.cj.jdbc.Driver");

            //2.Connection
            Connection
            conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/ereserv","root","A#2002
            @NwoK277&");

            //3.Statement
            PreparedStatement stmt=conn.prepareStatement("insert into
            passengerlist values(?,?,?)");
            stmt.setInt(1,1023227895);
            stmt.setString(2,"Kumaran");
            stmt.setInt(3,15);
            //4.Execute update
            stmt.executeUpdate();
            System.out.println("Insertion Done Successfully.!");
            //5.Closing the connection
            conn.close();

        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
}
```

Console:



MySQL database:

	PNRno	Pname	P_Age
▶	1023227895	Kumaran	15
	1123456782	Rajan	42
*	NULL	NULL	NULL

After insertion.

3.Updating a row entry using JAVA IDE.

Code.

```
import java.sql.DriverManager;
import java.sql.Statement;
import java.sql.Connection;

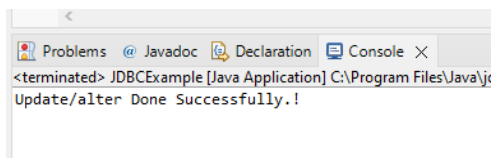
public class JDBCExample
{
    public static void main(String args[])
    {
        try
        {
            //1.register the driver
            Class.forName("com.mysql.cj.jdbc.Driver");

            //2.Connection
            Connection
            conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/ereserv","root","A#2002@NwoK277&");

            //3.Statement
            Statement stmt=conn.createStatement();
            //4.Execute update
            int rs = stmt.executeUpdate("update passengerlist set
PNRno=1000000238,Pname='MADHAN',P_Age=32 where PNRno=1023227895");
            if(rs>0) {System.out.println("Update/alter Done
Successfully.!!");}

            //5.Closing the connection
            conn.close();
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
}
```

Console:



MySQL database:

	PNRno	Pname	P_Age
▶	1023227895	Kumaran	15
	1123456782	Rajan	42
*	NULL	NULL	NULL

Before updation

Result Grid			
	PNRno	Pname	P_Age
▶	1000000238	MADHAN	32
	1123456782	Rajan	42
*	NULL	NULL	NULL

After Updation

4.deleting a row entry using java IDE.

Code:

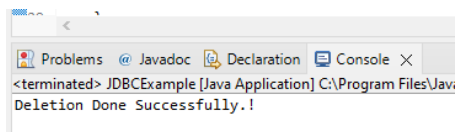
```
import java.sql.DriverManager;
import java.sql.Statement;
import java.sql.Connection;

public class JDBCExample
{
    public static void main(String args[])
    {
        try
        {
            //1.register the driver
            Class.forName("com.mysql.cj.jdbc.Driver");

            //2.Connection
            Connection
            conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/ereserv","root","A#2002
            @NwoK277&");

            //3.Statement
            Statement stmt=conn.createStatement();
            //4.Execute update
            int rs = stmt.executeUpdate("delete from passengerlist where
            PNRno=1123456782");
            if(rs>0) {System.out.println("Deletion Done Successfully.!");}
            //5.Closing the connection
            conn.close();
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
}
```

Console:



MySQL database:

	PNRno	Pname	P_Age
	1000000238	MADHAN	32
	1123456782	Rajan	42
*	NULL	NULL	NULL

Before deletion

	PNRno	Pname	P_Age
	1000000238	MADHAN	32
*	NULL	NULL	NULL

After deletion

5.Retrieving the data form MySQL database using java IDE.

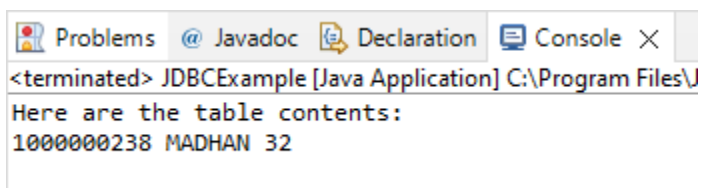
Code:

```
import java.sql.DriverManager;
import java.sql.Statement;
import java.sql.Connection;
import java.sql.ResultSet;
public class JDBCExample
{
    public static void main(String args[])
    {
        try
        {
            //1.register the driver
            Class.forName("com.mysql.cj.jdbc.Driver");

            //2.Connection
            Connection
            conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/ereserv","root","A#2002
            @NwoK277&");

            //3.Statement
            Statement stmt=conn.createStatement();
            //4.Execute update
            ResultSet rs = stmt.executeQuery("select * from passengerlist");
            System.out.println("Here are the table contents:");
            while(rs.next())
            {
                System.out.println(rs.getInt(1)+" "+rs.getString(2)+"
            "+rs.getInt(3));
            }
            //5.Closing the connection
            conn.close();
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
}
```

Console:



The screenshot shows the IDE's console window with tabs for Problems, Javadoc, Declaration, and Console. The Console tab is active, displaying the output of the application. The output starts with a status bar message: "<terminated> JDBCExample [Java Application] C:\Program Files\J". Below this, the text "Here are the table contents:" is printed, followed by a single line of data: "1000000238 MADHAN 32".

```
<terminated> JDBCExample [Java Application] C:\Program Files\J
Here are the table contents:
1000000238 MADHAN 32
```