

Smart Bridge - Model Application Development (Java Spring Boot)

Assessment -3

Aim:

To implement JDBC Connectivity using java.

Retrieve data using JDBC :

Code:

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

public class retrieve{

    public static void main(String args[]) {

        try {

            // 1.register the driver

            Class.forName("com.mysql.jdbc.Driver");

            // 2.Making connection

            Connection contn =
DriverManager.getConnection("jdbc:mysql://localhost:3306/Myproject", "root", "Madhu@2024");

            // 3.Create the Statement

            Statement stmt = contn.createStatement();

            // 4.Execute query

            ResultSet res = stmt.executeQuery("select * from fruits");

            while (res.next()) {

                System.out.println(res.getInt(1)+"\t"+res.getString(2)+"\t"+res.getInt(3));

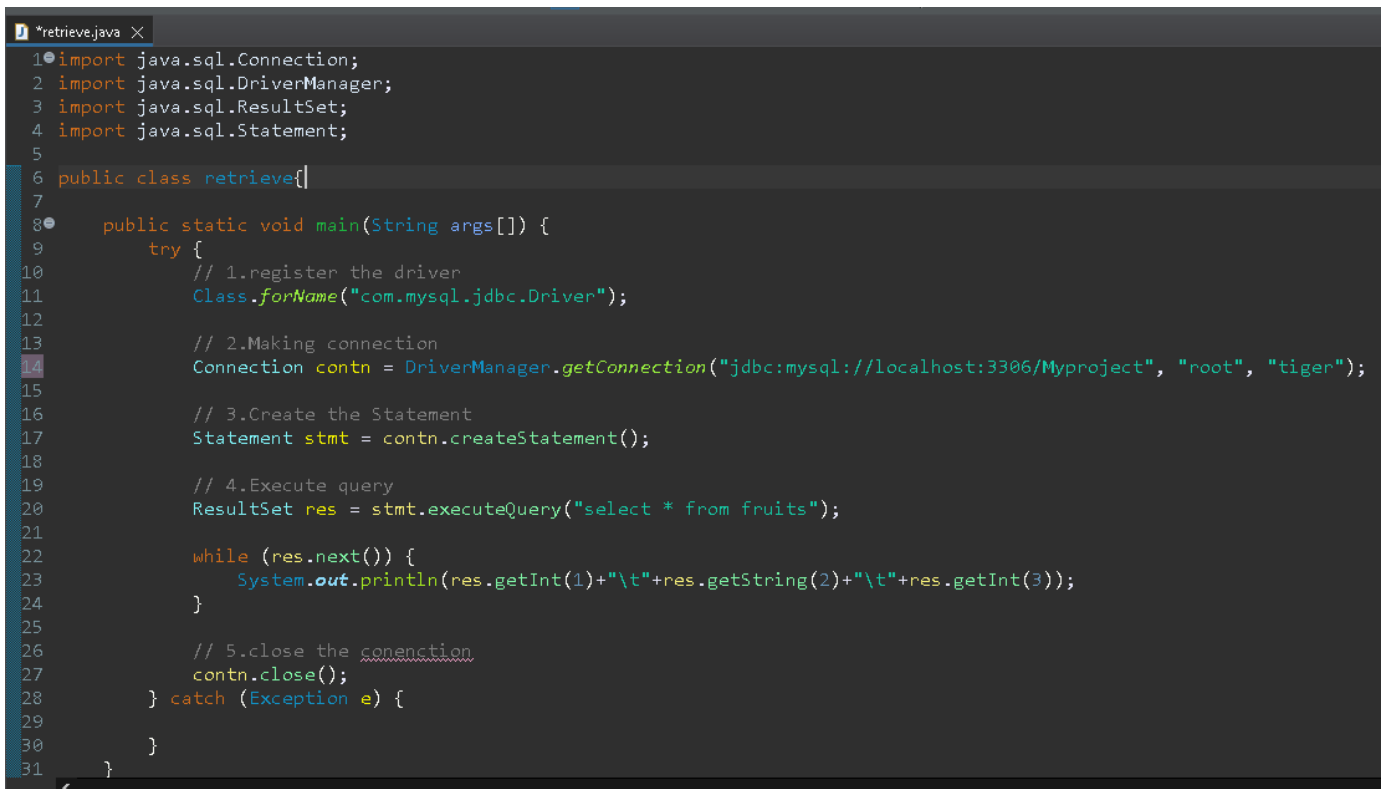
            }

        }

    }

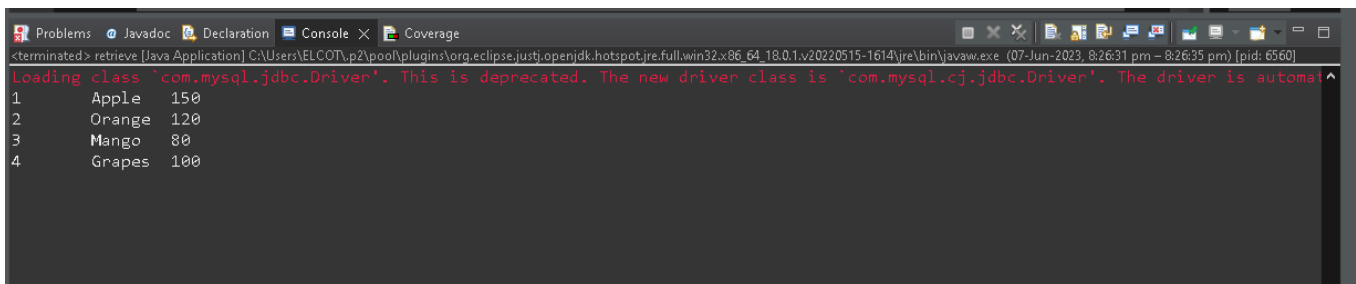
}
```

```
        // 5.close the conenction  
        contn.close();  
    } catch (Exception e) {  
    }  
}  
}
```



```
*retrieve.java X  
1 import java.sql.Connection;  
2 import java.sql.DriverManager;  
3 import java.sql.ResultSet;  
4 import java.sql.Statement;  
5  
6 public class retrieve{  
7  
8     public static void main(String args[]) {  
9         try {  
10             // 1.register the driver  
11             Class.forName("com.mysql.jdbc.Driver");  
12  
13             // 2.Making connection  
14             Connection contn = DriverManager.getConnection("jdbc:mysql://localhost:3306/Myproject", "root", "tiger");  
15  
16             // 3.Create the Statement  
17             Statement stmt = contn.createStatement();  
18  
19             // 4.Execute query  
20             ResultSet res = stmt.executeQuery("select * from fruits");  
21  
22             while (res.next()) {  
23                 System.out.println(res.getInt(1)+"\t"+res.getString(2)+"\t"+res.getInt(3));  
24             }  
25  
26             // 5.close the conenction  
27             contn.close();  
28         } catch (Exception e) {  
29  
30         }  
31     }  
}
```

Output:



```
Problems Javadoc Declaration Console X Coverage  
<terminated> retrieve [Java Application] C:\Users\ELCOT\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.18.0.1.v20220515-1614\jre\bin\java.exe (07-Jun-2023, 8:26:31 pm - 8:26:35 pm) [pid: 6560]  
Loading class 'com.mysql.jdbc.Driver'. This is deprecated. The new driver class is 'com.mysql.cj.jdbc.Driver'. The driver is automa  
1 Apple 150  
2 Orange 120  
3 Mango 80  
4 Grapes 100
```

Update the data:**Code:**

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

public class Update {

    public static void main(String[] args) {

        try {

            Class.forName("com.mysql.jdbc.Driver");

            Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/myproject","root","tiger");

            Statement stmt=con.createStatement();

            int rs=stmt.executeUpdate("insert into fruits(sno,name,price) values(5,\"Pomegranate\",140)");

            if(rs>0)
            {

                System.out.println("Successfully Updated");

            }

            ResultSet r=stmt.executeQuery("Select * from fruits");

            System.out.println();

            System.out.println();

            while(r.next())
            {

                System.out.println(r.getString(1)+"\t"+r.getString(2)+"\t"+r.getString(3));

            }

        }

        catch(Exception e){

            System.out.println(e.toString());

        }

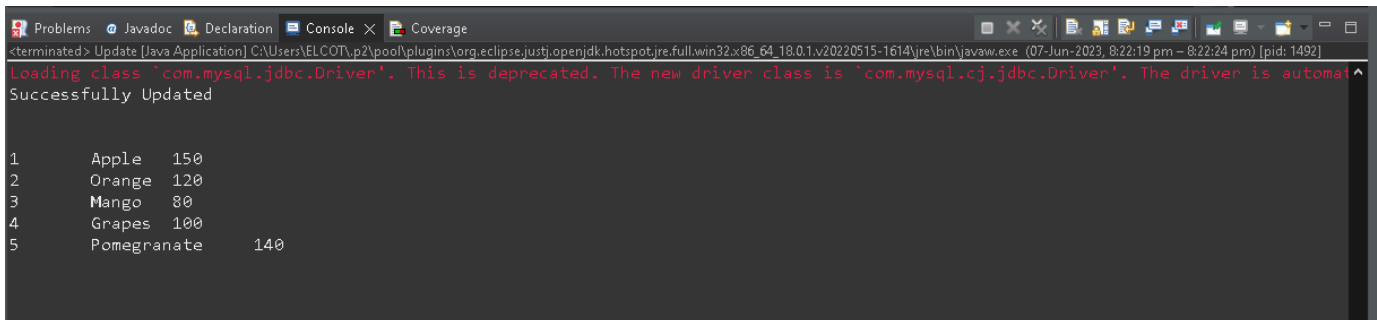
    }

}
```

```
}  
  
}
```

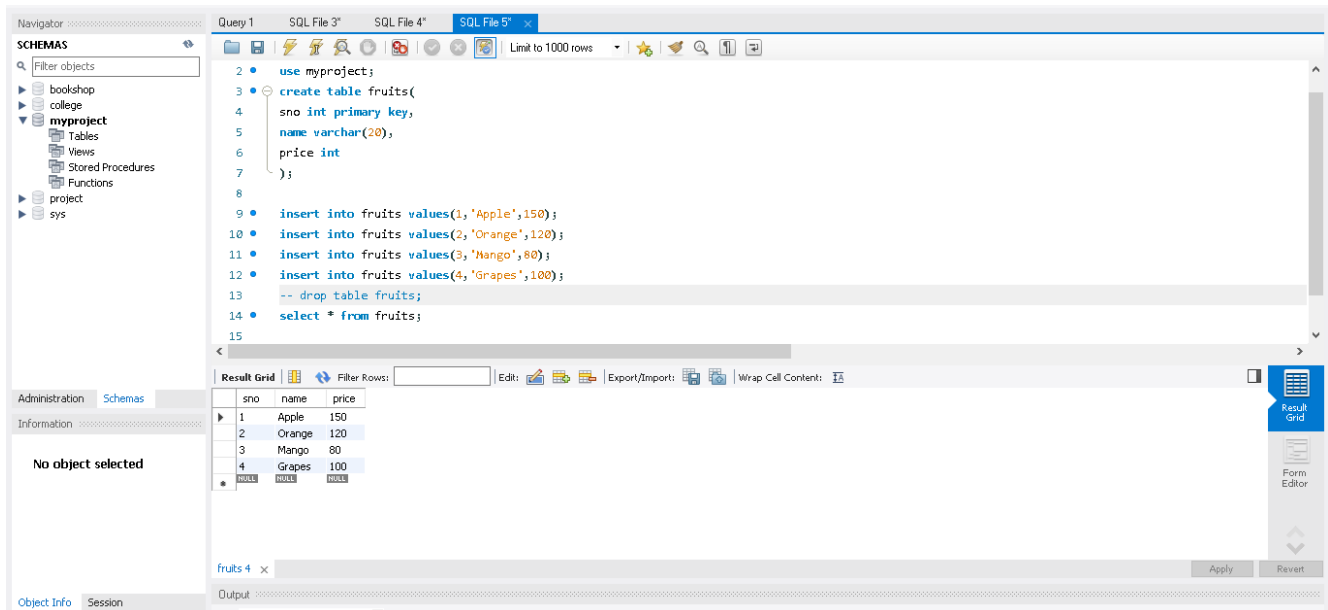
```
1 import java.sql.Connection;  
5 public class Update {  
6  
7     public static void main(String[] args) {  
8         try {  
9             Class.forName("com.mysql.jdbc.Driver");  
10            Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/myproject","root","tiger");  
11            Statement stmt=con.createStatement();  
12            int rs=stmt.executeUpdate("insert into fruits(sno,name,price) values(5,\"Pomegranate\",140)");  
13  
14            if(rs>0)  
15            {  
16                System.out.println("Successfully Updated");  
17            }  
18            ResultSet r=stmt.executeQuery("Select * from fruits");  
19            System.out.println();  
20            System.out.println();  
21            while(r.next())  
22            {  
23                System.out.println(r.getString(1)+"\t"+r.getString(2)+"\t"+r.getString(3));  
24            }  
25        }  
26        catch(Exception e){  
27            System.out.println(e.toString());  
28        }  
29    }  
30 }
```

Output:



```
<terminated> Update [Java Application] C:\Users\ELCOT\p2\poo\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_18.0.1.v20220515-1614\jre\bin\javaw.exe (07-Jun-2023, 8:22:19 pm - 8:22:24 pm) [pid: 1492]  
Loading class 'com.mysql.jdbc.Driver'. This is deprecated. The new driver class is 'com.mysql.cj.jdbc.Driver'. The driver is automatic  
Successfully Updated  
  
1      Apple   150  
2      Orange  120  
3      Mango   80  
4      Grapes  100  
5      Pomegranate 140
```

Before insert the data:



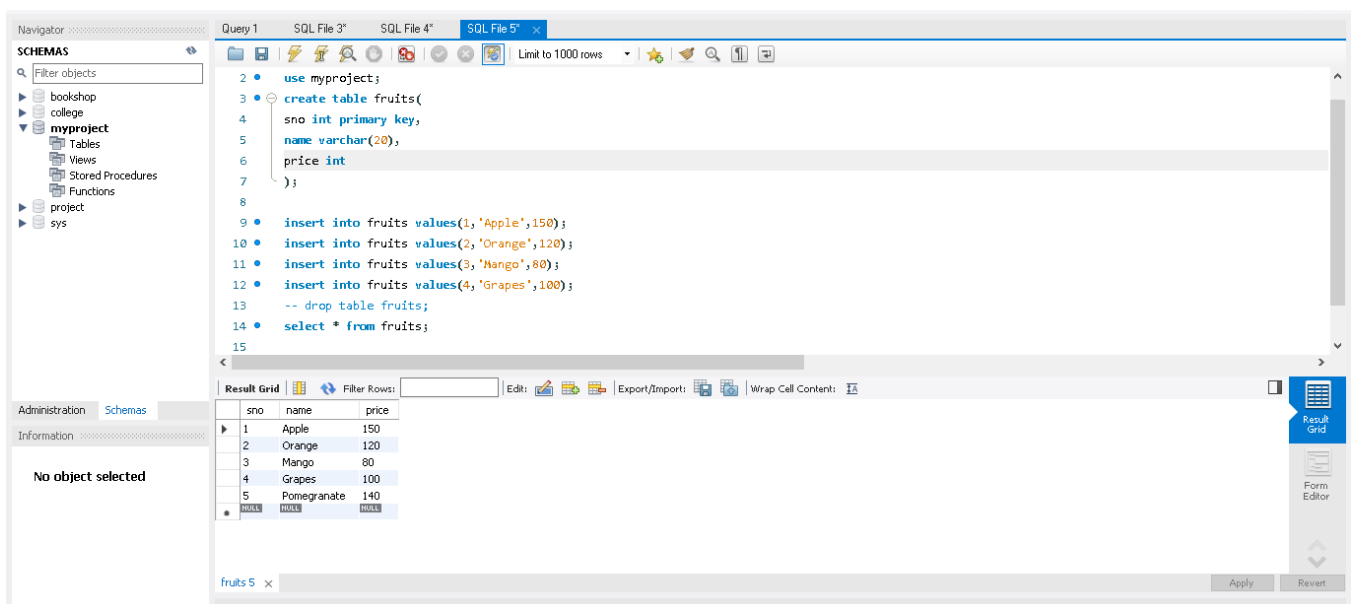
The screenshot shows the SQL Developer interface. The SQL editor contains the following script:

```
2 • use myproject;
3 • create table fruits(
4   sno int primary key,
5   name varchar(20),
6   price int
7 );
8
9 • insert into fruits values(1,'Apple',150);
10 • insert into fruits values(2,'Orange',120);
11 • insert into fruits values(3,'Mango',80);
12 • insert into fruits values(4,'Grapes',100);
13 -- drop table fruits;
14 • select * from fruits;
```

The Result Grid displays the data after the first insert operation:

sno	name	price
1	Apple	150
2	Orange	120
3	Mango	80
4	Grapes	100

After insert the data:



The screenshot shows the SQL Developer interface. The SQL editor contains the same script as before:

```
2 • use myproject;
3 • create table fruits(
4   sno int primary key,
5   name varchar(20),
6   price int
7 );
8
9 • insert into fruits values(1,'Apple',150);
10 • insert into fruits values(2,'Orange',120);
11 • insert into fruits values(3,'Mango',80);
12 • insert into fruits values(4,'Grapes',100);
13 -- drop table fruits;
14 • select * from fruits;
```

The Result Grid displays the data after the second insert operation:

sno	name	price
1	Apple	150
2	Orange	120
3	Mango	80
4	Grapes	100
5	Pomegranate	140

Conclusion:

The JDBC connectivity has implemented and the retrieved data has updated successfully using java.