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ASSIGNMENT – 3

JDBC- WEEK 3

Q: Implementing JDBC operations in java.

Table: Student.

| # | Name | Type | Collation | Attributes | Null | Default | Comments | Extra | Action |
|--------------------------|------|----------|-------------|--------------------|------|---------|----------|-------|--------------------|
| <input type="checkbox"/> | 1 | name | varchar(20) | utf8mb4_general_ci | | No | None | | Change Drop More |
| <input type="checkbox"/> | 2 | password | varchar(20) | utf8mb4_general_ci | | No | None | | Change Drop More |
| <input type="checkbox"/> | 3 | country | varchar(20) | utf8mb4_general_ci | | No | None | | Change Drop More |
| <input type="checkbox"/> | 4 | mark | int(3) | | | No | None | | Change Drop More |

Initially empty table:

Browse Structure SQL Search Insert Export

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0002 seconds.)

```
SELECT * FROM `student`
```

☐ Profiling [[Edit inline](#)] [[Edit](#)] [[Explain SQL](#)] [[Create PHP code](#)] [[Refresh](#)]

name **password** **country** **mark**

Query results operations

Create view

1. Insertion of data into table:

Code:

i. `insert into student values('Bjron','1@123','Norway',40)`


```
import java.sql.*;
public class jdbc {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        try
        {
            Class.forName("com.mysql.cj.jdbc.Driver");
            Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3307/Assignment","root",
"");

            Statement stmt = con.createStatement();
            System.out.println("Inserting Records ...");
            String sql = "insert into student
values('Bjron','1@123','Norway',40)";
            stmt.executeUpdate(sql);
            System.out.println("Records Successfully inserted :)
!!");
        }
        catch(Exception e)
        {
            System.out.println("Hey there is a SQL error: " + e);
        }

    }

}
```



```
jdbccjava x
1 import java.sql.*;
2 public class jdbc {
3
4     public static void main(String[] args) {
5         // TODO Auto-generated method stub
6         try
7         {
8             Class.forName("com.mysql.cj.jdbc.Driver");
9             Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3307/Assignment","root","");
10            Statement stmt = con.createStatement();
11            System.out.println("Inserting Records ...");
12            String sql = "insert into student values('Bjron','1@123','Norway',40)";
13            stmt.executeUpdate(sql);
14            System.out.println("Records Successfully inserted :) !!");
15        }
16        catch(Exception e)
17        {
18            System.out.println("Hey there is a SQL error: " + e);
19        }
20
21    }
22 }
```

Outputs:

```
Console X
<terminated> jdbc [Java Application] C:\Program Files\Java\jdk-17.0.1\bin\javaw.exe
Inserting Records ...
Records Successfully inserted :) !!
```

Table:

| name | password | country | mark |
|-------|----------|---------|------|
| Bjron | 1@123 | Norway | 40 |

ii. `insert into student values('John','password','Cadana',60)`

Code:

```
jdbcjvava X
1 import java.sql.*;
2 public class jdbc {
3
4     public static void main(String[] args) {
5         // TODO Auto-generated method stub
6         try
7         {
8             Class.forName("com.mysql.cj.jdbc.Driver");
9             Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3307/Assignment","root","");
10            Statement stmt = con.createStatement();
11            System.out.println("Inserting Records ...");
12            String sql = "insert into student values('John','password','Cadana',60)";
13            stmt.executeUpdate(sql);
14            System.out.println("Records Successfully inserted :) !!");
15        }
16        catch(Exception e)
17        {
18            System.out.println("Hey there is a SQL error: " + e);
19        }
20    }
21 }
22
23 }
```

Output:

Console ×
<terminated> jdbc [Java Application] C:\Program Files\Java\
Inserting Records ...
Records Successfully inserted :) !!

Table:

| name | password | country | mark |
|-------|----------|---------|------|
| Bjron | 1@123 | Norway | 40 |
| John | password | Cadana | 60 |

Code:

```
iii. insert into student  
values('Sarath','1234567890q','India',80)
```

```
jdbc.java ×  
1 import java.sql.*;  
2 public class jdbc {  
3  
4     public static void main(String[] args) {  
5         // TODO Auto-generated method stub  
6         try  
7         {  
8             Class.forName("com.mysql.cj.jdbc.Driver");  
9             Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3307/Assignment","root","");  
10            Statement stmt = con.createStatement();  
11            System.out.println("Inserting Records ...");  
12            String sql = "insert into student values('Sarath','1234567890q','India',80)";  
13            stmt.executeUpdate(sql);  
14            System.out.println("Records Successfully inserted :) !!");  
15        }  
16        catch(Exception e)  
17        {  
18            System.out.println("Hey there is a SQL error: " + e);  
19        }  
20    }  
21 }  
22  
23 }
```

Output:

```
Console X
<terminated> jdbc [Java Application] C:\Program Files\Java\jdk-17.0.1\bin\
Inserting Records ...
Records Successfully inserted :) !!
```

Table:

| name | password | country | mark |
|--------|-------------|---------|------|
| Bjron | 1@123 | Norway | 40 |
| John | password | Cadana | 60 |
| Sarath | 1234567890q | India | 80 |

2. Updating records in table:

```
update student set mark = 50 where name = 'Bjron'
```

Code:

```
import java.sql.*;
public class jdbc {


    public static void main(String[] args) {
        // TODO Auto-generated method stub
        try
        {
            Class.forName("com.mysql.cj.jdbc.Driver");
            Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3307/Assignment","root
","");

            Statement stmt = con.createStatement();
            System.out.println("Updating Records ...");
            String sql = "update student set mark = 50 where name =
'Bjron'";

            stmt.executeUpdate(sql);
            System.out.println("Successfully updated the table :)
!!");
        }
        catch(Exception e)
        {
            System.out.println("Hey there is a SQL error: " + e);
        }

    }

}
```



The screenshot shows a code editor window titled 'jdbc.java'. The code is a Java program that uses JDBC to connect to a MySQL database and update a record. The code is as follows:

```
1 import java.sql.*;
2 public class jdbc {
3
4     public static void main(String[] args) {
5         // TODO Auto-generated method stub
6         try
7         {
8             Class.forName("com.mysql.cj.jdbc.Driver");
9             Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3307/Assignment","root","");
10            Statement stmt = con.createStatement();
11            System.out.println("Updating Records ...");
12            String sql = "update student set mark = 50 where name = 'Bjron'";
13            stmt.executeUpdate(sql);
14            System.out.println("Successfully updated the table :) !!");
15        }
16        catch(Exception e)
17        {
18            System.out.println("Hey there is a SQL error: " + e);
19        }
20    }
21 }
22
23 }
```

Output:

```
Console ×  
<terminated> jdbc [Java Application] C:\Program Files\Java\jdk-17.0.1\bin\javaw.exe  
Updating Records ...  
Successfully updated the table :) !!
```

Table:

| name | password | country | mark |
|--------|-------------|---------|------|
| Bjron | 1@123 | Norway | 50 |
| John | password | Cadana | 60 |
| Sarath | 1234567890q | India | 80 |

3. Deleting the records:

```
delete from student where country='Norway'
```

Code:

```
import java.sql.*;
public class jdbc {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        try
        {
            Class.forName("com.mysql.cj.jdbc.Driver");
            Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3307/Assignment","root",
"");

            Statement stmt = con.createStatement();
            String sql = "delete from student where
country='Norway'";
            stmt.executeUpdate(sql);
            System.out.println("Record deleted from the table :)
!!");
        }
        catch(Exception e)
        {
            System.out.println("Hey there is a SQL error: " + e);
        }
    }
}
```



```
jdb.java x
1 import java.sql.*;
2 public class jdbc {
3
4     public static void main(String[] args) {
5         // TODO Auto-generated method stub
6         try
7         {
8             Class.forName("com.mysql.cj.jdbc.Driver");
9             Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3307/Assignment","root","");
10            Statement stmt = con.createStatement();
11            String sql = "delete from student where country='Norway'";
12            stmt.executeUpdate(sql);
13            System.out.println("Record deleted from the table :) !!");
14        }
15        catch(Exception e)
16        {
17            System.out.println("Hey there is a SQL error: " + e);
18        }
19    }
20 }
21
22 }
```


Output:

```
Console ×  
<terminated> jdbc [Java Application] C:\Program Files\Java\jdk-9.0.4\bin\java.exe  
Record deleted from the table :) !!
```

Table:

| name | password | country | mark |
|--------|-------------|---------|------|
| John | password | Cadana | 60 |
| Sarath | 1234567890q | India | 80 |