

Assignment No 2

Q. Write a program by using `execute()` in which client should be able to execute it's queries
e.g. Enter query `Select * From table`.

Statement Interface - The statement interface provides methods to execute queries with the database. The statement interface is a factory of `ResultSet`. i.e. it provides factory method to get the object of `ResultSet`.

Commonly used methods of statement Interface

- `public ResultSet executeQuery (String sql)`
- `public int executeUpdate (String sql)`
- `public boolean execute (String sql)`
- `public int[] executeBatch ()`

Execute Method

`final boolean execute (java.lang.String sql)`

• Parameter

`sql`

A string that contains an SQL statements.

- Return Value

true if the statement returns a result set, false if it returns an update count or no result

- Exception

SQLException

- Description / Remarks

This execute method is specified by the execute method in the java.sql.Statement interface.

This method override the execute method that is found in the SQLException class

```

package net.codejava;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import java.util.Scanner;

public class execute {

    public static void main(String[] args) throws Exception {
        // TODO Auto-generated method stub
        String url = "jdbc:mysql://localhost:3306/assignment2";
        String username = "blackhat";
        String password = "blackhat";

        //Connect to sql server
        Connection con = DriverManager.getConnection(url, username, password);
        System.out.println("Database connected successfully ");
        String query;

        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the query");
        query = sc.nextLine();

        //create jdbc statement obj
        Statement st = con.createStatement();
        boolean flag = st.execute(query);

        //gather and process the result
        if(flag == true) // when select sql is executed
        {
            ResultSet rs = st.getResultSet();
            while(rs.next())
            {
                System.out.println(rs.getInt(1)+ " " +rs.getString(2)+" "+ rs.getString(3));
            }
            rs.close();
        } //if close
        else //when non-select query is executed
        {
            int rowcount = st.getUpdateCount();
            System.out.println("Number of records affected : "+ rowcount);
        }
        st.close();

        //close jdbc obj

        con.close();
    }
}

```

<terminated> execute [Java Application] C:\Program Files

Database connected successfully

Enter the query

Select * from students;

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Problems @ Javadoc Declaration Console

<terminated> execute [Java Application] C:\Program Files\Java\jdk-11.0.11\bin\javaw.exe (30-May-2021, 8:27:19 AM – 8:27:40 AM)

Database connected successfully

Enter the query

```
Insert into students (id, Firstname ,Lastname) Values ('45','xyz','XYZ'),('47','abc','ABC'),('54','pqr','PQR');
```

Number of records affected : 3

<terminated> execute [Java Application] C:\Program Files\Java\jdk-11.

Database connected successfully

Enter the query

Select * from students;

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45 xyz XYZ

47 abc ABC

54 pqr PQR

<terminated> execute [Java Application] C:\Program Files\Java\jdk-11.0.11\bin\javaw.exe (30-May

Database connected successfully

Enter the query

update students SET Firstname = 'mno', Lastname = 'MNO' WHERE id=47;

Number of records affected : 1

<terminated> execute [Java Application] C:\Program Files\Java\jdk-11.0.11\bin

Database connected successfully

Enter the query

Select * from students;

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45 xyz XYZ

47 mno MNO

54 pqr PQR

<terminated> execute [Java Application] C:\Program Files\Java\jdk-

Database connected successfully

Enter the query

Delete from students where id = 45;

Number of records affected : 1

```
mysql> Select * from students;
```

id	Firstname	LastName
39	Bhavin	Patil
47	mno	MNO
54	pqr	PQR

```
3 rows in set (0.00 sec)
```