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Java

(13)

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### Assignment - 4

- Java program creates a simple student database using MySQL and performs the following operations:
1. connects to a MySQL database named "Java db" at localhost.
  2. creates a table named "student" with two columns, "student" with two columns: SNO (integer) and SNAME (varchar(20)), if the table doesn't already exist.
  3. prompts the user to input 5 student records (SNO and SNAME).
  4. inserts the user-inputted records into the "student" table.
  5. closes the database connection and resources.

Program:

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.Scanner;

public class main {
    public static void main(String [] args) {
        Scanner scanner = new Scanner(System.in);
        try {
            Class.forName("com.mysql.cj.jdbc.Driver");
        }
```

```
string url="jdbc:mysql:  
    string user="root";  
    string password="";  
    connection con=Driver Manager.getConnection(url, user,  
    password);  
    statement stmt=con.createStatement();  
    string createTableSql="CREATE TABLE IF NOT EXISTS student  
(SNO int, SNAME VARCHAR(20));  
    for(int i=0; i<5; i++) {  
        System.out.println("Enter student number:");  
        int sno= scanner.nextInt();  
        scanner.nextLine();  
        System.out.println("Enter student name:");  
        String sname= scanner.nextLine();  
        String insertSql= String.format("INSERT INTO student (SNO,  
        SNAME) VALUES (%d, '%s')", sno, sname);  
        stmt.executeUpdate(insertSql);  
    }  
    System.out.println("Records inserted successfully");  
    stmt.close();  
    con.close();  
}  
catch (ClassNotFoundException | SQLException){  
    e.printStackTrace();  
}  
finally {  
    scanner.close();  
}
```

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;
import java.sql.Statement;
import java.sql.*;
import java.util.Scanner;

public class main {
    public static void main (String [] args) {
        Scanner scanner = new Scanner (System.in);

        try {
            Class.forName ("com.mysql.cj.jdbc.Driver");
            String url = "jdbc:mysql://localhost:3306/javadb";
            String user = "root";
            String password = "";
            Connection con = DriverManager.getConnection (url, user, password);

            Statement stmt = con.createStatement();

            String createTableSql = "CREATE TABLE IF NOT EXISTS student (SNO INT, SNAME VARCHAR(20))";
            System.out.println ("Enter Student Name:");
            String sname = scanner.nextLine();
            String insertSql = String.format ("INSERT INTO student (SNO, SNAME) VALUES ('%d', '%s')", sno, sname);
            stmt.executeUpdate (insertSql);
        }
    }
}
```

```
System.out.println ("records inserted successfully..");
String sql = "select * FROM student";
```

```
ResultSet rs=null;
rs=stmt.executeQuery();
System.out.println("Student details are:");
while(rs.next())
{
    int sno=rs.getInt("SNO");
    String sname=rs.getString("SNAME");
    System.out.print("SNO:"+sno+", SNAME:"+sname);
}
stmt.close();
con.close();
catch(ClassNotFoundException | SQLException e)
{
    e.printStackTrace();
}
finally
{
    scanner.close();
}
```