JDBC_Mini_Project:

JDBC-(JAVA-MYSQL-Mini project)

Create table Student

Insert records

Print table

Update table

Find out highest percentage students

Arrange records in ascending order

Find all the student which belong to same city

Add new column

Modify column datatype

Change the name of table

Delete column

Delete single row

Delete all the records from table without affecting table attributes

Delete entire table

Join two tables student and an institute and print only common record from both the table

Join two tables student and an institute and print only left side table record

Join two tables student and an institute and print only right side table record

Join two tables student and an institute and print all the records from both the tables

Program:

```java
package jdbc_Mini_Project;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

public class Create_Student {
```

```java
public static void main(String[] args) {
    String url="jdbc:mysql://localhost:3306/mydb";
    String user="root";
    String password="Swapna@123";

    String sql="create table student(rollno int,"
            +"name varchar(50),"
            +"per int,"
            +"email varchar(50),"
            +"city varchar(50))";
    String insertSql="insert into student values(101,'Spandana',80,'abc@gmail.com','kdp'),"
            +"(102,'Swapna',85,'def@gmail.com','kdp'),"
            +"(103,'Jyoshna',90,'ghi@gmail.com','kdp')";

    String updateSql="update student set per=95 where name='Spandana'";

    String highest_per_qry="select * from students where per=(select max(per) from student)";

    try {
        Class.forName("com.mysql.cj.jdbc.Driver");
        Connection con=DriverManager.getConnection(url, user, password);
        Statement stmt=con.createStatement();
        stmt.executeUpdate(sql);
        System.out.println("Student table created.");

        //insert records
        stmt.executeUpdate(insertSql);
        System.out.println("Inserted records");
```

```java
ResultSet rs=stmt.executeQuery("select * from student ");
System.out.println("Roll\tName\tPercentage\tEmail\tCity");
while(rs.next()) {

        int roll=rs.getInt("rollno");

        String name=rs.getString("name");

        int per=rs.getInt("per");

        String email=rs.getString("email");

        String city=rs.getString("city");

        System.out.println(roll+" "+name+" "+per+"  "+email+" "+city);

}


//update record
stmt.executeUpdate(updateSql);
System.out.println("Updated record");


rs=stmt.executeQuery("select * from student ");
System.out.println("Roll\tName\tPercentage\tEmail\tCity");
while(rs.next()) {

        int roll=rs.getInt("rollno");

        String name=rs.getString("name");

        int per=rs.getInt("per");

        String email=rs.getString("email");

        String city=rs.getString("city");

        System.out.println(roll+" "+name+" "+per+"  "+email+" "+city);

}


//find highest percentage student
rs=stmt.executeQuery(highest_per_qry);
System.out.println("Highest percentage student: ");
while(rs.next()) {
```

```java
                String name=rs.getString("name");

                int per=rs.getInt("per");

                System.out.println(name+"  "+per);

        }

        System.out.println("----------------------------");

        //Arrange records in ascending order

        System.out.println("Arranging records in ascending order ");

        rs=stmt.executeQuery("select * from student order by per asc");

        while(rs.next()) {

                String name=rs.getString("name");

                int per=rs.getInt("per");

                System.out.println(name+"  "+per);

        }


        System.out.println("----------------------------");

        //Find all the student which belong to same city

        System.out.println("same city students: ");

        rs=stmt.executeQuery("select * from student where city in(select city from
student group by city)");

        while(rs.next()) {

                int roll=rs.getInt("rollno");

                String name=rs.getString("name");

                int per=rs.getInt("per");

                String email=rs.getString("email");

                String city=rs.getString("city");

                System.out.println(roll+" "+name+" "+per+"  "+email+" "+city);

        }


        System.out.println("----------------------------");
        //Add new column

        stmt.executeUpdate("alter table student add contact varchar(20)");
```

```java
            System.out.println("Added column contact to student table");


System.out.println("----------------------------");
            //Modify column datatype
            stmt.executeUpdate("alter table student modify contact bigint");
            System.out.println("Modified contact colunm  datatype");


            System.out.println("----------------------------");
            //Change the name of table
            stmt.executeUpdate("rename table student to studentdetails");
            System.out.println("Renamed table student to studentdetails");


            System.out.println("----------------------------");
            //Delete column
            stmt.executeUpdate("alter table studentdetails drop column contact");
            System.out.println("deleted contact column");


            System.out.println("----------------------------");
            //Delete single row
            stmt.executeUpdate("delete from studentdetails where rollno=103");
            System.out.println("deleted 1 row");


            System.out.println("----------------------------");
            //Delete all the records from table without affecting table attributes
            stmt.executeUpdate("truncate table studentdetails");
            System.out.println("deleted all records ");


            System.out.println("----------------------------");
            //Delete entire table
            stmt.executeUpdate("drop table studentdetails");
            System.out.println("Dropped studentdetails table");
```

```java
System.out.println("-----------------------------");
//Join two tables student and an institute and print only common record from both the table
stmt.executeUpdate("create table if not exists student(rollno int primary key,name varchar(20))");
stmt.executeUpdate("create table if not exists institute(rollno int primary key,course varchar(20))");
stmt.executeUpdate("insert into student values(101,'Person1'),(102,'Person2')");
stmt.executeUpdate("insert into institute values(101,'course1'),(103,'course2')");

System.out.println("student table :");
rs=stmt.executeQuery("select * from student");
while(rs.next()) {
        System.out.println(rs.getInt("rollno")+"\t"+rs.getString("name"));
}

System.out.println("institute table :");
rs=stmt.executeQuery("select * from institute");
while(rs.next()) {
        System.out.println(rs.getInt("rollno")+"\t"+rs.getString("course"));
}

System.out.println("Inner join");
rs=stmt.executeQuery("select * from student inner join institute where student.rollno=institute.rollno");
while(rs.next()) {

System.out.println(rs.getInt("rollno")+"\t"+rs.getString("name")+"\t"+rs.getString("course"));
}
```

```java
				System.out.println("-------------------------------");
				//Join two tables student and an institute and print only left side table
record
				System.out.println("Left join");
				rs=stmt.executeQuery("select * from student left join institute on
student.rollno=institute.rollno");
				while(rs.next()) {

		System.out.println(rs.getInt("rollno")+"\t"+rs.getString("name")+"\t"+rs.getString("course"));
				}


				//Join two tables student and an institute and print only right side table
record
				System.out.println("-------------------------------");
				System.out.println("Right join");
				rs=stmt.executeQuery("select * from student right join institute on
student.rollno=institute.rollno");
				while(rs.next()) {

		System.out.println(rs.getInt("rollno")+"\t"+rs.getString("name")+"\t"+rs.getString("course"));
				}


				//Join two tables student and an institute and print all the records from both
the tables
				System.out.println("-------------------------------");
				System.out.println("Full join");
				rs=stmt.executeQuery("select * from student left join institute on
student.rollno=institute.rollno"
						+" union "
						+"select * from student right join institute on
student.rollno=institute.rollno");
				while(rs.next()) {

		System.out.println(rs.getInt("rollno")+"\t"+rs.getString("name")+"\t"+rs.getString("course"));
```

```java
            }




            rs.close();

            stmt.close();

            con.close();


        }catch(ClassNotFoundException e) {

            System.out.println(e);

        }catch(SQLException e) {

            System.out.println(e);

        }

    }


}
```