**PRACTICAL 2.3**

**AIM:**

Write RMI application where client will send Enrolment number and Name of a student to the server. Server will Open a database connection and store the Information in Database.

**CODE:**

**RemoteInterface.java**

import java.rmi.\*;

public interface RemoteInterface extends Remote {

public void insert(int enrollNo, String name) throws RemoteException;

}

**Server.java**

import java.rmi.\*;

import java.rmi.server.\*;

import java.sql.\*;

public class Server extends UnicastRemoteObject implements RemoteInterface {

//JDBC Driver Name and Database URL

static final String JDBC\_DRIVER = "com.mysql.jdbc.Driver";

static final String DB\_URL = "jdbc:mysql://localhost:3306/s2b130050131525";

//Database Credentials

static final String USER = "root";

static final String PASS = "mysql";

public Server() throws RemoteException{

super();

}

public void insert(int enrollNo, String name) throws RemoteException {

Connection conn = null;

Statement stmt = null;

try{

//STEP 2: Register JDBC Driver

Class.forName(JDBC\_DRIVER);

//STEP 3: Open a Connection

System.out.println("Connecting to selected database");

conn = DriverManager.getConnection(DB\_URL, USER, PASS);

System.out.println("Connected to database successful");

//STEP 4: Creating Statement

stmt = conn.createStatement();

//STEP 5: Execute Statements

System.out.println("Inserting records into the table");

String sql = "INSERT INTO student\_data VALUES(" + enrollNo + ", '" + name + "')";

stmt.executeUpdate(sql);

System.out.println("Records inserted");

} catch(SQLException se){

//Handle errors for JDBC

se.printStackTrace();

} catch(Exception e){

//Handle errors for Class.forName

e.printStackTrace();

} finally{

//finally block used to close resources

try{

if(stmt!=null)

conn.close();

} catch(SQLException se){

}

try{

if(conn!=null)

conn.close();

} catch(SQLException se){

se.printStackTrace();

}

}

System.out.println("Goodbye!");

}

}

**Registration.java**

import java.rmi.\*;

import java.net.\*;

public class Registration {

public static void main(String[] args){

try {

Server s=new Server();

Naming.rebind("SERVICE",s);

System.out.println("Bindins Successful. Server Started");

} catch(Exception e) {

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

}

}

}

**Client.java**

import java.rmi.\*;

import java.io.\*;

import java.util.Scanner;

public class Client {

public static void main(String[] args) {

Scanner in = new Scanner(System.in);

int enrollNo;

String name;

try {

System.out.println("Enrollment No.: 130050131525");

String ip="rmi://localhost/SERVICE";

RemoteInterface s = (RemoteInterface)Naming.lookup(ip);

System.out.print("Enrollment No.: ");

enrollNo = in.nextInt();

System.out.print("Name: ");

name = in.next();

s.insert(enrollNo, name);

} catch(Exception e) {

e.printStackTrace();

}

}

}

**OUTPUT:**









