

**UNIVERSITY OF MUMBAI Practical Examination – November 2018 M.C.A Semester – V**  
**LABORATORY L502 [Open Source System for ADC Lab]**

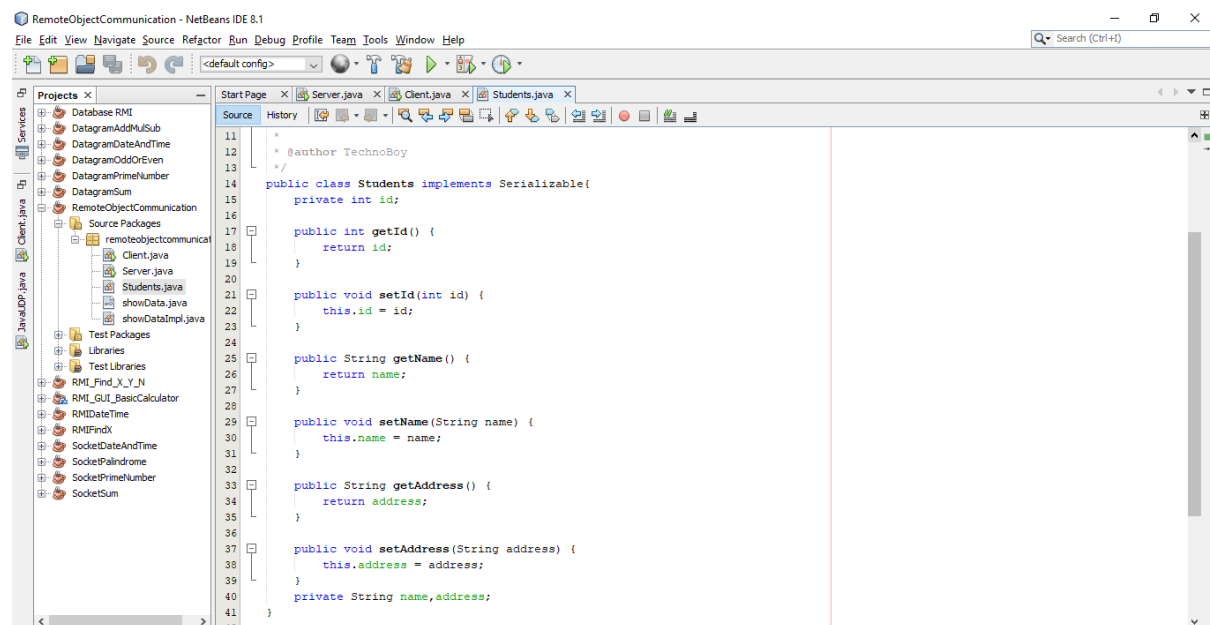
Retrieve the list of books available in the library from Library Database. Use Remote Object Communication

Write a program to retrieve MTNL billing information from MTNL database by using the concept of remote object communication

Retrieve the students' information from the college database. Use Remote Object Communication

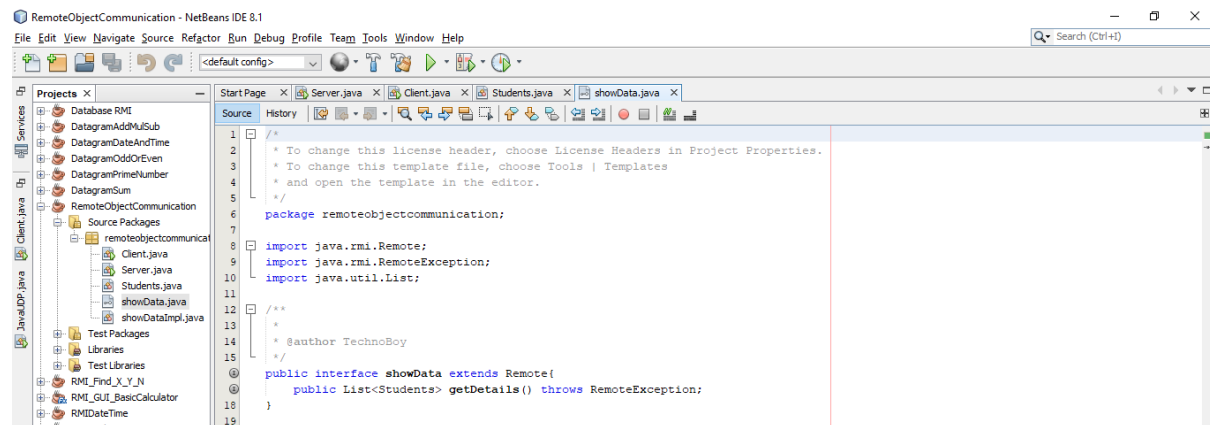
Retrieve the Patients details from the hospital database. Use Remote Object Communication

### Students.java



```
11  *
12  * @author TechnoBoy
13  */
14  public class Students implements Serializable{
15      private int id;
16
17      public int getId() {
18          return id;
19      }
20
21      public void setId(int id) {
22          this.id = id;
23      }
24
25      public String getName() {
26          return name;
27      }
28
29      public void setName(String name) {
30          this.name = name;
31      }
32
33      public String getAddress() {
34          return address;
35      }
36
37      public void setAddress(String address) {
38          this.address = address;
39      }
40      private String name,address;
41  }
```

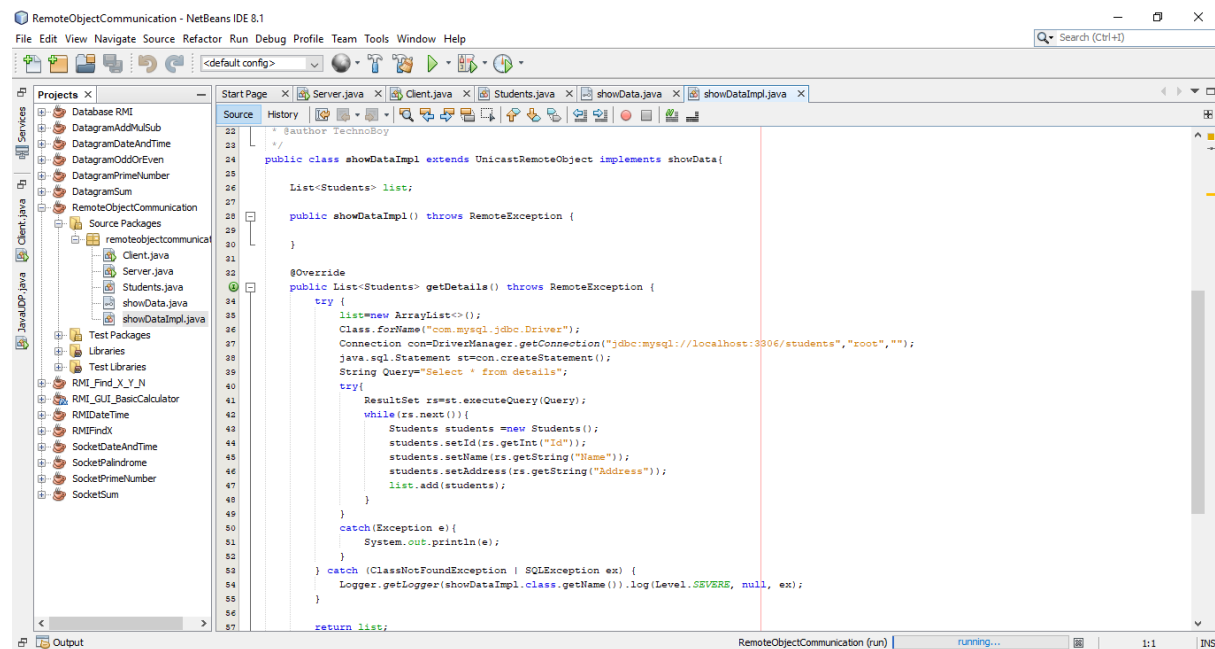
### showData.java



```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6  package remoteobjectcommunication;
7
8  import java.rmi.Remote;
9  import java.rmi.RemoteException;
10 import java.util.List;
11
12 /**
13 *
14 * @author TechnoBoy
15 */
16 public interface showData extends Remote{
17     public List<Students> getDetails() throws RemoteException;
18 }
19
```

# UNIVERSITY OF MUMBAI Practical Examination – November 2018 M.C.A Semester – V LABORATORY L502 [Open Source System for ADC Lab]

## showDataImpl.java



```
RemoteObjectCommunication - NetBeans IDE 8.1
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  DatagramOddOrEven
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  Server.java
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  showDataImpl.java
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  RMI_GUI_BasicCalculator
  RMI_DateTime
  RMI_FindX
  SocketDateAndTime
  SocketPalindrome
  SocketPrimeNumber
  SocketSum
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  Libraries
  Test Libraries
  RMI_Find_X_Y_N
  RMI_GUI_BasicCalculator
  RMI_DateTime
  RMI_FindX
  SocketDateAndTime
  SocketPalindrome
  SocketPrimeNumber
  SocketSum
Source
  22
  23 * @author TechnoBoy
  24
  25 public class showDataImpl extends UnicastRemoteObject implements showData{
  26
  27     List<Students> list;
  28
  29     public showDataImpl() throws RemoteException {
  30
  31     }
  32
  33     @Override
  34     public List<Students> getDetails() throws RemoteException {
  35         try {
  36             list=new ArrayList<>();
  37             Class.forName("com.mysql.jdbc.Driver");
  38             Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/students","root","");
  39             java.sql.Statement st=con.createStatement();
  40             String Query="Select * from details";
  41             try{
  42                 ResultSet rs=st.executeQuery(Query);
  43                 while(rs.next()){
  44                     Students students =new Students();
  45                     students.setId(rs.getInt("Id"));
  46                     students.setName(rs.getString("Name"));
  47                     students.setAddress(rs.getString("Address"));
  48                     list.add(students);
  49                 }
  50             } catch (Exception e){
  51                 System.out.println(e);
  52             }
  53         } catch (ClassNotFoundException | SQLException ex) {
  54             Logger.getLogger(showDataImpl.class.getName()).log(Level.SEVERE, null, ex);
  55         }
  56         return list;
  57     }
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