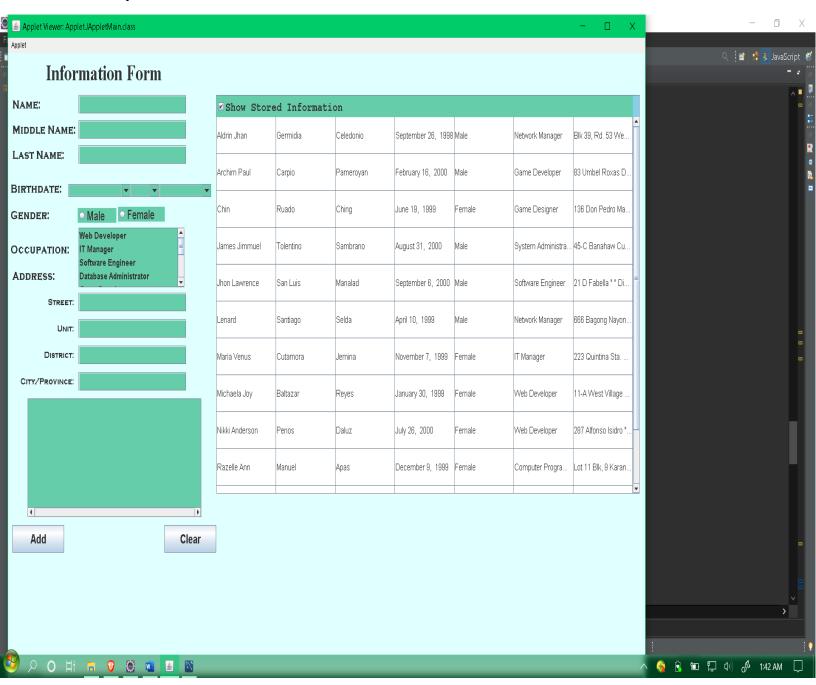
#### **Archim Paul C. Pameroyan**

#### **DICT 2-5**

# **Information Form**

## **Output:**



# **JApplet Code:**

```
package Applet;
import ConnectionDB.ConnectionDB;
import net.proteanit.sql.DbUtils;
import javax.swing.JApplet;
import java.awt.Color;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import java.awt.Font;
import javax.swing.SwingConstants;
import java.awt.Dimension;
import javax.swing.JTextField;
import javax.swing.JComboBox;
import javax.swing.ButtonGroup;
import javax.swing.JTextArea;
import javax.swing.JRadioButton;
import javax.swing.JScrollPane;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.awt.event.ltemEvent;
```

```
import java.awt.event.ltemListener;
import javax.swing.JButton;
import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.ResultSetMetaData;
import java.sql.SQLException;
import java.sql.Statement;
import javax.swing.JTable;
import javax.swing.JCheckBox;
import javax.swing.table.DefaultTableModel;
import javax.swing.ScrollPaneConstants;
import javax.swing.JList;
import javax.swing.ListSelectionModel;
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;
public class JAppletMain extends JApplet implements ActionListener, ItemListener {
       public JAppletMain() throws ClassNotFoundException, InstantiationException,
SQLException, IllegalAccessException {
              conn = ConnectionDB.getConnection();
```

```
}
//Declaration Variable//
       JTextField TFName, TFMiddlename, TFLastname, TFStreet, TFUnit, TFDistrict, TFCity;
       JButton BClear, BAdd;
       JTextArea TAAddress;
       JLabel LInfo, LName, LMiddlename, LLastname, LStreet, LCity, LUnit, LDistrict, LAddress,
LGender, LBirthdate,
                     LOccupation;
       JRadioButton RBMale, RBFemale;
       JComboBox<String> CBYear, CBMonth, CBDate;
       ButtonGroup Gender;
       JScrollPane SPane1, SPane2, SPane3;
       JList<String> List;
       JTable TInformation;
       JCheckBox CBox;
       public ResultSetMetaData rsmd = null;
       public Connection conn = null;
       public Statement st = null;
       public PreparedStatement ps = null;
       public ResultSet rs = null;
       // Applet Initialization//
       public void init() {
              this.setSize(new Dimension(1500, 1000));
              this.repaint();
              getContentPane().setBackground(new Color(224, 255, 255));
```

```
getContentPane().setLayout(null);
// Label//
Linfo = new JLabel("Information Form");
LInfo.setHorizontalAlignment(SwingConstants.CENTER);
LInfo.setVerticalAlignment(SwingConstants.TOP);
Linfo.setFont(new Font("Times New Roman", Font.BOLD, 35));
LInfo.setBounds(32, 12, 385, 40);
getContentPane().add(LInfo);
LName = new JLabel("Name:");
LName.setBackground(Color.WHITE);
LName.setFont(new Font("Copperplate Gothic Bold", Font.PLAIN, 20));
LName.setHorizontalAlignment(SwingConstants.LEFT);
LName.setBounds(10, 68, 146, 31);
getContentPane().add(LName);
LMiddlename = new JLabel("Middle Name:");
LMiddlename.setHorizontalAlignment(SwingConstants.LEFT);
LMiddlename.setFont(new Font("Copperplate Gothic Bold", Font.PLAIN, 20));
LMiddlename.setBackground(Color.WHITE);
LMiddlename.setBounds(10, 109, 150, 31);
getContentPane().add(LMiddlename);
LLastname = new JLabel("Last Name:");
LLastname.setHorizontalAlignment(SwingConstants.LEFT);
LLastname.setFont(new Font("Copperplate Gothic Bold", Font.PLAIN, 20));
```

```
LLastname.setBackground(Color.WHITE);
LLastname.setBounds(10, 150, 150, 31);
getContentPane().add(LLastname);
LStreet = new JLabel("Street:");
LStreet.setHorizontalAlignment(SwingConstants.RIGHT);
LStreet.setFont(new Font("Copperplate Gothic Bold", Font.PLAIN, 15));
LStreet.setBackground(Color.WHITE);
LStreet.setBounds(10, 390, 146, 31);
getContentPane().add(LStreet);
LUnit = new JLabel("Unit:");
LUnit.setHorizontalAlignment(SwingConstants.RIGHT);
LUnit.setFont(new Font("Copperplate Gothic Bold", Font.PLAIN, 15));
LUnit.setBackground(Color.WHITE);
LUnit.setBounds(10, 433, 146, 31);
getContentPane().add(LUnit);
LDistrict = new JLabel("District:");
LDistrict.setHorizontalAlignment(SwingConstants.RIGHT);
LDistrict.setFont(new Font("Copperplate Gothic Bold", Font.PLAIN, 15));
LDistrict.setBackground(Color.WHITE);
LDistrict.setBounds(10, 476, 146, 31);
getContentPane().add(LDistrict);
LCity = new JLabel("City/Province:");
LCity.setHorizontalAlignment(SwingConstants.RIGHT);
```

```
LCity.setFont(new Font("Copperplate Gothic Bold", Font.PLAIN, 15));
LCity.setBackground(Color.WHITE);
LCity.setBounds(10, 519, 146, 31);
getContentPane().add(LCity);
LGender = new JLabel("Gender:");
LGender.setHorizontalAlignment(SwingConstants.LEFT);
LGender.setFont(new Font("Copperplate Gothic Bold", Font.PLAIN, 20));
LGender.setBackground(Color.WHITE);
LGender.setBounds(6, 248, 150, 31);
getContentPane().add(LGender);
LBirthdate = new JLabel("Birthdate:");
LBirthdate.setHorizontalAlignment(SwingConstants.LEFT);
LBirthdate.setFont(new Font("Copperplate Gothic Bold", Font.PLAIN, 20));
LBirthdate.setBackground(Color.WHITE);
LBirthdate.setBounds(6, 205, 150, 31);
getContentPane().add(LBirthdate);
LOccupation = new JLabel("Occupation:");
LOccupation.setHorizontalAlignment(SwingConstants.LEFT);
LOccupation.setFont(new Font("Copperplate Gothic Bold", Font.PLAIN, 20));
LOccupation.setBackground(Color.WHITE);
LOccupation.setBounds(6, 304, 150, 31);
getContentPane().add(LOccupation);
LAddress = new JLabel("Address:");
```

```
LAddress.setHorizontalAlignment(SwingConstants.LEFT);
              LAddress.setFont(new Font("Copperplate Gothic Bold", Font.PLAIN, 20));
              LAddress.setBackground(Color.WHITE);
              LAddress.setBounds(10, 347, 150, 31);
              getContentPane().add(LAddress);
              // Text Field//
              TFName = new JTextField();
              TFName.addKeyListener(new KeyAdapter() {
                     public void keyPressed(KeyEvent e) {
                            char c = e.getKeyChar();
                            if (Character.isLetter(c) | | Character.isWhitespace(c) | |
Character.isISOControl(c)) {
                                   TFName.setEditable(true);
                            } else {
                                   TFName.setEditable(false);
                            }
                     }
              });
              TFName.setBackground(new Color(102, 205, 170));
              TFName.setFont(new Font("Cooper Black", Font.PLAIN, 15));
              TFName.setBounds(166, 68, 254, 31);
              TFName.setColumns(10);
              getContentPane().add(TFName);
              TFMiddlename = new JTextField();
              TFMiddlename.addKeyListener(new KeyAdapter() {
```

```
public void keyPressed(KeyEvent e) {
                             char c = e.getKeyChar();
                             if (Character.isLetter(c) | | Character.isWhitespace(c) | |
Character.isISOControl(c)) {
                                    TFMiddlename.setEditable(true);
                            } else {
                                    TFMiddlename.setEditable(false);
                            }
                     }
              });
              TFMiddlename.setFont(new Font("Cooper Black", Font.PLAIN, 15));
              TFMiddlename.setColumns(10);
              TFMiddlename.setBackground(new Color(102, 205, 170));
              TFMiddlename.setBounds(166, 109, 254, 31);
              getContentPane().add(TFMiddlename);
              TFLastname = new JTextField();
              TFLastname.addKeyListener(new KeyAdapter() {
                     public void keyPressed(KeyEvent e) {
                             char c = e.getKeyChar();
                             if (Character.isLetter(c) | | Character.isWhitespace(c) | |
Character.isISOControl(c)) {
                                    TFLastname.setEditable(true);
                            } else {
                                    TFLastname.setEditable(false);
                            }
                     }
              });
```

```
TFLastname.setFont(new Font("Cooper Black", Font.PLAIN, 15));
              TFLastname.setColumns(10);
              TFLastname.setBackground(new Color(102, 205, 170));
              TFLastname.setBounds(166, 150, 254, 31);
              getContentPane().add(TFLastname);
              TFStreet = new JTextField();
              TFStreet.addKeyListener(new KeyAdapter() {
                     public void keyPressed(KeyEvent e) {
                            char c = e.getKeyChar();
                            if (Character.isLetter(c) | | Character.isWhitespace(c) | |
Character.isISOControl(c)) {
                                    TFStreet.setEditable(true);
                            } else {
                                    TFStreet.setEditable(false);
                            }
                     }
              });
              TFStreet.setFont(new Font("Cooper Black", Font.PLAIN, 15));
              TFStreet.setColumns(10);
              TFStreet.setBackground(new Color(102, 205, 170));
              TFStreet.setBounds(166, 390, 254, 31);
              getContentPane().add(TFStreet);
              TFUnit = new JTextField();
              TFUnit.setFont(new Font("Cooper Black", Font.PLAIN, 15));
              TFUnit.setColumns(10);
```

```
TFUnit.setBackground(new Color(102, 205, 170));
              TFUnit.setBounds(166, 433, 254, 31);
              getContentPane().add(TFUnit);
              TFDistrict = new JTextField();
              TFDistrict.setFont(new Font("Cooper Black", Font.PLAIN, 15));
              TFDistrict.setColumns(10);
              TFDistrict.setBackground(new Color(102, 205, 170));
              TFDistrict.setBounds(166, 476, 254, 31);
              getContentPane().add(TFDistrict);
              TFCity = new JTextField();
              TFCity.addKeyListener(new KeyAdapter() {
                      public void keyPressed(KeyEvent e) {
                             char c = e.getKeyChar();
                             if (Character.isLetter(c) | | Character.isWhitespace(c) | |
Character.isISOControl(c)) {
                                    TFCity.setEditable(true);
                             } else {
                                    TFCity.setEditable(false);
                             }
                      }
              });
              TFCity.setFont(new Font("Cooper Black", Font.PLAIN, 15));
              TFCity.setColumns(10);
              TFCity.setBackground(new Color(102, 205, 170));
              TFCity.setBounds(166, 519, 254, 31);
```

```
getContentPane().add(TFCity);
              // Combo Box//
              String month[] = { " ", "January", "February", "March", "April", "May", "June",
"July", "August", "September",
                            "October", "November", "December" };
              CBMonth = new JComboBox(month);
              CBMonth.setForeground(Color.BLACK);
              CBMonth.setBackground(new Color(102, 205, 170));
              CBMonth.setFont(new Font("Copperplate Gothic Light", Font.PLAIN, 20));
              CBMonth.setBounds(142, 213, 146, 21);
              CBMonth.setActionCommand((String) CBMonth.getSelectedItem());
              getContentPane().add(CBMonth);
              String date[] = { " ", "1", "2", "3", "4", "5", "6", "7", "8", "9", "10", "11", "12",
"13", "14", "15", "16",
                            "17", "18", "19", "20", "21", "22", "23", "24", "25", "26", "27",
"28", "29", "30", "31" };
              CBDate = new JComboBox(date);
              CBDate.setBackground(new Color(102, 205, 170));
              CBDate.setName("Date");
              CBDate.setFont(new Font("Copperplate Gothic Light", Font.PLAIN, 20));
              CBDate.setBounds(289, 213, 66, 21);
              CBDate.setActionCommand((String) CBDate.getSelectedItem());
              getContentPane().add(CBDate);
```

```
String year[] = { " ", "2020", "2019", "2018", "2017", "2016", "2015", "2014",
"2013", "2012", "2011", "2010",
                             "2009", "2008", "2007", "2006", "2005", "2004", "2003", "2002",
"2001", "2000", "1999", "1998", "1997",
                            "1996", "1995", "1994", "1993", "1992", "1991", "1990", "1989",
"1988", "1987", "1986", "1985", "1984",
                            "1983", "1982", "1981", "1980", "1979", "1978", "1977", "1976",
"1975", "1974", "1973", "1972", "1971",
                            "1970", "1969", "1968", "1967", "1966", "1965", "1964", "1963",
"1962", "1961", "1960", "1959", "1958",
                            "1957", "1956", "1955", "1954", "1953", "1952", "1951", "1950",
"1949", "1948", "1947", "1946", "1945",
                            "1944", "1943", "1942", "1941", "1940", "1939", "1938", "1937",
"1936", "1935", "1934", "1933", "1932",
                            "1931", "1930", "1929", "1928", "1927", "1926", "1925", "1924",
"1923", "1922", "1921", "1920" };
              CBYear = new JComboBox(year);
              CBYear.setBackground(new Color(102, 205, 170));
              CBYear.setName("Year");
              CBYear.setFont(new Font("Copperplate Gothic Light", Font.PLAIN, 20));
              CBYear.setBounds(356, 213, 122, 21);
              CBDate.setActionCommand((String) CBDate.getSelectedItem());
              getContentPane().add(CBYear);
              // Text Area//
              SPane2 = new JScrollPane();
```

SPane2.setHorizontalScrollBarPolicy(ScrollPaneConstants.HORIZONTAL\_SCROLLBAR\_AL WAYS);

SPane2.setBounds(46, 562, 410, 194);

```
getContentPane().add(SPane2);
TAAddress = new JTextArea();
SPane2.setViewportView(TAAddress);
TAAddress.setEditable(false);
TAAddress.setWrapStyleWord(false);
TAAddress.setFont(new Font("Cooper Black", Font.PLAIN, 20));
TAAddress.setLineWrap(false);
TAAddress.setBackground(new Color(102, 205, 170));
// Radio Button//
RBMale = new JRadioButton("Male");
RBMale.setBackground(new Color(102, 205, 170));
RBMale.setFont(new Font("Dialog", Font.PLAIN, 20));
RBMale.setBounds(164, 252, 91, 24);
RBMale.setActionCommand("Male");
getContentPane().add(RBMale);
RBFemale = new JRadioButton("Female");
RBFemale.setBackground(new Color(102, 205, 170));
RBFemale.setFont(new Font("Dialog", Font.PLAIN, 20));
RBFemale.setBounds(259, 250, 110, 24);
RBFemale.setActionCommand("Female");
getContentPane().add(RBFemale);
Gender = new ButtonGroup();
Gender.add(RBMale);
Gender.add(RBFemale);
```

```
// Button//
              BAdd = new JButton("Add");
              BAdd.addActionListener(new ActionListener() {
                      public void actionPerformed(ActionEvent e) {
                             if (TFName.getText().trim().length() == 0) {
                                     JOptionPane.showMessageDialog(null, "Please Fill Up The
Form First!");
                             } else if (TFMiddlename.getText().trim().length() == 0) {
                                     JOptionPane.showMessageDialog(null, "Please Fill Up The
Form First!");
                             } else if (TFLastname.getText().trim().length() == 0) {
                                     JOptionPane.showMessageDialog(null, "Please Fill Up The
Form First!");
                             } else if (TFUnit.getText().trim().length() == 0) {
                                     JOptionPane.showMessageDialog(null, "Please Fill Up The
Form First!");
                             } else if (TFStreet.getText().trim().length() == 0) {
                                     JOptionPane.showMessageDialog(null, "Please Fill Up The
Form First!");
                             } else if (TFCity.getText().trim().length() == 0) {
                                     JOptionPane.showMessageDialog(null, "Please Fill Up The
Form First!");
                             } else if (TFDistrict.getText().trim().length() == 0) {
                                     JOptionPane.showMessageDialog(null, "Please Fill Up The
Form First!");
                             } else if (List.getSelectedValue() == null) {
                                     JOptionPane.showMessageDialog(null, "Please Fill Up The
Form First!");
                             } else if (Gender.isSelected(null)) {
```

```
JOptionPane.showMessageDialog(null, "Please Fill Up The
Form First!");
                             } else if (CBMonth.getSelectedItem() == " ") {
                                    JOptionPane.showMessageDialog(null, "Please Fill Up The
Form First!");
                             } else if (CBDate.getSelectedItem() == " ") {
                                    JOptionPane.showMessageDialog(null, "Please Fill Up The
Form First!");
                             } else if (CBYear.getSelectedItem() == " ") {
                                    JOptionPane.showMessageDialog(null, "Please Fill Up The
Form First!");
                             }
                             else {
                                    String space = " ";
                                    String comma = ",";
                                    TAAddress.setText(TFUnit.getText() + space +
TFStreet.getText() + space + TFDistrict.getText()
                                                   + space + "District" + comma + space +
TFCity.getText());
                             }
                             try {
                                    String query = "insert into information
(FName, MName, LName, Birthdate, Gender, Occupation, Address) values (?,?,?,?,?,?)";
                                    ps = conn.prepareStatement(query);
                                    ps.setString(1, TFName.getText());
                                    ps.setString(2, TFMiddlename.getText());
```

```
ps.setString(3, TFLastname.getText());
                                    ps.setString(4, (String) CBMonth.getSelectedItem() + " " +
(String) CBDate.getSelectedItem() + ", "
                                                   + " " + (String) CBYear.getSelectedItem());
                                    ps.setString(5,
Gender.getSelection().getActionCommand());
                                    ps.setString(6, (String) List.getSelectedValue());
                                    ps.setString(7, TAAddress.getText());
                                    ps.execute();
                                    JOptionPane.showMessageDialog(null, "Successfully
Added");
                                    ps.close();
                             } catch (Exception ex) {
                                    ex.printStackTrace();
                             }
                     }
              });
              BAdd.setFont(new Font("Dialog", Font.BOLD, 20));
              BAdd.setBounds(10, 768, 122, 45);
              getContentPane().add(BAdd);
              BClear = new JButton("Clear");
              BClear.addActionListener(new ActionListener() {
                      public void actionPerformed(ActionEvent e) {
```

```
TFName.setText("");
              TFMiddlename.setText("");
              TFLastname.setText("");
              TFUnit.setText("");
             TFCity.setText("");
             TFStreet.setText("");
              TFDistrict.setText("");
              TAAddress.setText("");
              Gender.clearSelection();
              CBMonth.setSelectedItem(null);
              CBDate.setSelectedItem(null);
              CBYear.setSelectedItem(null);
              List.clearSelection();
       }
});
BClear.setFont(new Font("Dialog", Font.BOLD, 20));
BClear.setBounds(368, 768, 122, 45);
getContentPane().add(BClear);
// Table//
DefaultTableModel TModel = new DefaultTableModel();
TModel.addColumn("First Name");
TModel.addColumn("Middle Name");
TModel.addColumn("Last Name");
TModel.addColumn("Birthdate");
TModel.addColumn("Gender");
```

```
TModel.addColumn("Occupation");
      TModel.addColumn("Address");
      TInformation = new JTable(TModel);
      TInformation.setRowHeight(60);
      TInformation.setRowSelectionAllowed(false);
      TInformation.setFocusable(false);
      TInformation.setEditingRow(0);
      TInformation.setEditingColumn(0);
      TInformation.setAutoCreateRowSorter(true);
      TInformation.setAutoCreateColumnsFromModel(false);
      TInformation.setFont(new Font("Dialog",Font.PLAIN,15));
      SPane1 = new JScrollPane();
      SPane1.setBackground(new Color(135, 206, 235));
      SPane1.setFont(new Font("Copperplate Gothic Light", Font.PLAIN, 10));
SPane1.setVerticalScrollBarPolicy(ScrollPaneConstants.VERTICAL_SCROLLBAR_ALWAYS);
      SPane1.setBounds(490, 68, 998, 650);
      getContentPane().add(SPane1);
      SPane1.setViewportView(TInformation);
      // Checkbox//
      CBox = new JCheckBox("Show Stored Information");
      SPane1.setColumnHeaderView(CBox);
      CBox.addActionListener(new ActionListener() {
             public void actionPerformed(ActionEvent e) {
                    if (CBox.isSelected()) {
```

```
} else {
                                   TInformation.setModel(TModel);
                            }
                     }
              }
              );
              CBox.setBackground(new Color(102, 205, 170));
              CBox.setFont(new Font("DialogInput", Font.BOLD, 20));
              // List Box//
              String list[] = { "Web Developer", "IT Manager", "Software Engineer", "Database
Administrator",
                            "Game Developer", "Computer Programmer", "Network
Engineer", "Game Designer", "System Administrator",
                            "Network Manager" };
              SPane3 = new JScrollPane();
       SPane3.setVerticalScrollBarPolicy(ScrollPaneConstants.VERTICAL_SCROLLBAR_ALWAYS);
              SPane3.setBounds(166, 284, 250, 98);
              getContentPane().add(SPane3);
              List = new JList(list);
              List.setFont(new Font("Dialog", Font.BOLD, 15));
              List.setSelectionMode(ListSelectionModel.SINGLE SELECTION);
```

ShowData();

```
List.getSelectedValue();
      SPane3.setViewportView(List);
      List.setBackground(new Color(102, 205, 170));
}
//Displays Data from Database//
public void ShowData() {
      DefaultTableModel TModel = new DefaultTableModel();
      TModel.addColumn("First Name");
      TModel.addColumn("Middle Name");
      TModel.addColumn("Last Name");
      TModel.addColumn("Birthdate");
      TModel.addColumn("Gender");
      TModel.addColumn("Occupation");
      TModel.addColumn("Address");
      try {
              Class.forName("com.mysql.cj.jdbc.Driver").newInstance();
              Statement st = conn.createStatement();
              st.executeQuery("select * from informationdb.information");
              ResultSet rs = st.getResultSet();
              TInformation.setModel(DbUtils.resultSetToTableModel(rs));
```

```
} catch (Exception e) {
                     JOptionPane.showMessageDialog(null, "Error: Can't Display Data");
              }
      }
       @Override
       public void itemStateChanged(ItemEvent arg0) {
             // TODO Auto-generated method stub
      }
       @Override
       public void actionPerformed(ActionEvent arg0) {
             // TODO Auto-generated method stub
      }
}
```

### **Database Connection Code:**

```
package ConnectionDB;
import java.sql.*;
public class ConnectionDB {
static String driver = "com.mysql.cj.jdbc.Driver";
static String url ="jdbc:mysql://localhost:3306/informationdb";
static String username = "root";
static String password = "kakashijirachisohaer";
public static Connection getConnection(){
Connection conn=null;
try{
Class.forName(driver);
conn=DriverManager.getConnection(url,username,password);
}catch(Exception er){System.out.println(er);}
return conn;
}
}
```