Practical-8

Aim - Create web application in java to store the data in table using mongodb and display data in table & Design the Form with Insert, Delete, Update and Load Db Button.

CODE:

```
import com.mongodb.BasicDBObject; import
com.mongodb.DB; import com.mongodb.DBCollection;
import com.mongodb.DBCursor; import
com.mongodb.MongoClient; import
javax.swing.table.DefaultTableModel;
/*
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
*/
/**
* @author baps
*/
public class Jay extends javax.swing.JFrame {
  /**
* Creates new form Urmi
  */
```

```
public MongoClient mongo;
public DB db; public DBCollection
table;
  DefaultTableModel tb;
                               {
  public
                 Jav()
initComponents();
  }
  public void con_db(){
                           mongo= new
MongoClient("localhost",27017);
                                    db=(DB) mongo.getDB("xyz");
tb = (DefaultTableModel) jTable.getModel();
                                                     table =
db.getCollection("urmijava");
                                 tb.setRowCount(0);
DBCursor cr =table.find();
                            while(cr.hasNext()){
      BasicDBObject obj = (BasicDBObject) cr.next();
      Object[] ROW =
{obj.getString("enrollment"),obj.getString("firstname"),obj.getString("lastname"),obj.getString("branch
name")};
      tb.addRow(ROW);
    }
  }
* This method is called from within the constructor to initialize the form. * WARNING: Do
 NOT modify this code. The content of this method is always
* regenerated by the Form Editor.
  */
  @SuppressWarnings("unchecked")
  20012011130_Patel Vandankumar R.
                                                                                            Batch(AB3)
```

// <editor-fold defaultstate="collapsed" desc="Generated Code">

```
initComponents() {
    jLabel1 = new javax.swing.JLabel();
                                          iLabel2
= new javax.swing.JLabel();
                              jLabel3 = new
javax.swing.JLabel();
                                 jLabel4 = new
javax.swing.JLabel();
                             enrollment = new
javax.swing.JTextField();
                               firstname = new
javax.swing.JTextField();
                                lastname = new
javax.swing.JTextField();
                             jScrollPane1 = new
javax.swing.JScrollPane();
                                  jTable = new
javax.swing.JTable();
                               btninsert = new
javax.swing.JButton();
                              btnupdate = new
javax.swing.JButton();
                               btndelete = new
                                 btnload = new
javax.swing.JButton();
javax.swing.JButton();
                             branchname = new
javax.swing.JTextField();
                            jLabel5 = new
javax.swing.JLabel();
    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
                                                                                 setBackground(new
java.awt.Color(204, 204, 255));
    jLabel1.setFont(new
                           java.awt.Font("Yu
                                                Gothic
                                                           UI",
                                                                        18));
                                                                               //
                                                                                     NOI18N
                                                                  0,
jLabel1.setText("Enter Enrollment No.");
    jLabel2.setFont(new
                           java.awt.Font("Yu
                                                           UI",
                                                                        18));
                                                                               //
                                                                                     NOI18N
                                                 Gothic
                                                                  0,
jLabel2.setText("Enter First Name");
    jLabel3.setFont(new java.awt.Font("Yu Gothic UI", 0, 18)); // NOI18N jLabel3.setText("Enter
    Last Name");
```

private void

```
¡Label4.setFont(new
                           java.awt.Font("Yu
                                                 Gothic
                                                            UI",
                                                                   0,
                                                                         18));
                                                                                 //
                                                                                       NOI18N
jLabel4.setText("Enter Branch");
    enrollment.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
    firstname.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
    lastname.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
    jTable.setFont(new
                              java.awt.Font("Times New
                                                                                     14)); //
                                                             Roman",
                                                                             1,
       NOI18N
                    jTable.setModel(new javax.swing.table.DefaultTableModel(
      new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
      },
      new String [] {
        "Enrollment No. ", "First Name", "Last Name", "Branch"
      }
    ));
    jTable.addMouseListener(new
                                      java.awt.event.MouseAdapter()
                                                                             {
                                                                                    public
void mouseClicked(java.awt.event.MouseEvent evt) {
        jTableMouseClicked(evt);
      }
    });
    jScrollPane1.setViewportView(jTable);
    btninsert.setBackground(new java.awt.Color(204, 204, 204)); btninsert.setFont(new
    java.awt.Font("Rockwell Condensed", 0, 18)); // NOI18N
                                                                     102));
    btninsert.setForeground(new java.awt.Color(102,
                                                             102,
    btninsert.setText("INSERT");
```

```
btninsert.addActionListener(new
                                     {
java.awt.event.ActionListener()
                                      public void actionPerformed(java.awt.event.ActionEvent
                                                                                                  evt)
       {
                 btninsertActionPerformed(evt);
      }
    });
    btnupdate.setBackground(new
                                                            204,
                                                                    204));
                                                                              btnupdate.setFont(new
                                     java.awt.Color(204,
java.awt.Font("Rockwell Condensed", 0, 18)); // NOI18N
                                                           btnupdate.setForeground(new
java.awt.Color(102,
                      102,
                              102));
                                        btnupdate.setText("UPDATE");
btnupdate.addActionListener(new
                                     {
java.awt.event.ActionListener()
                                      public void actionPerformed(java.awt.event.ActionEvent
                                                                                                  evt)
       {
                 btnupdateActionPerformed(evt);
      }
    });
    btndelete.setBackground(new
                                     java.awt.Color(204,
                                                            204.
                                                                    204));
                                                                              btndelete.setFont(new
java.awt.Font("Rockwell Condensed", 0, 18)); // NOI18N
                                                           btndelete.setForeground(new
java.awt.Color(102,
                      102,
                              102));
                                        btndelete.setText("DELETE");
                                                                    btndelete.addActionListener(new
java.awt.event.ActionListener()
                                      public void actionPerformed(java.awt.event.ActionEvent
                                                                                                  evt)
       {
                 btndeleteActionPerformed(evt);
      }
    });
    btnload.setBackground(new
                                                                    255)); btnload.setFont(new
                                     java.awt.Color(153,
                                                            153,
java.awt.Font("Calibri", 1, 18)); // NOI18N
    btnload.setForeground(new
                                     java.awt.Color(255,
                                                            255,
                                                                    255));
btnload.setText("LOAD DB");
                                btnload.addActionListener(new
```

```
public void actionPerformed(java.awt.event.ActionEvent
java.awt.event.ActionListener() {
                                                                                               evt)
       {
                 btnloadActionPerformed(evt);
      }
    });
    branchname.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
    jLabel5.setBackground(new java.awt.Color(153, 153, 255));
                                                               jLabel5.setFont(new
java.awt.Font("Stencil", 1, 24)); // NOI18N
                                           jLabel5.setForeground(new
       java.awt.Color(255,
                                              jLabel5.setText("Student Data");
                             255,
                                    255));
    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
                                      layout.setHorizontalGroup(
layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
      .addGroup(layout.createSequentialGroup()
        .addGap(96, 96, 96)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
          .addGroup(layout.createSequentialGroup()
            .addComponent(btninsert,
                                           javax.swing.GroupLayout.PREFERRED_SIZE,
                                                                                       138,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(btnload, javax.swing.GroupLayout.PREFERRED_SIZE,
                                                                                268,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(0, 214, Short.MAX_VALUE))
          .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
.addComponent(jScrollPane1, javax.swing.GroupLayout.Alignment.LEADING)
              .addGroup(javax.swing.GroupLayout.Alignment.LEADING, layout.createSequentialGroup()
                .addGap(193, 193, 193)
                .addComponent(btnupdate, javax.swing.GroupLayout.PREFERRED_SIZE,
                                                                                        145,
javax.swing.GroupLayout.PREFERRED_SIZE)
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(btndelete, javax.swing.GroupLayout.PREFERRED_SIZE,
                                                                                        154,
javax.swing.GroupLayout.PREFERRED_SIZE)))
```

```
.addGap(56, 56, 56))))
      .addGroup(layout.createSequentialGroup()
        .addGap(135, 135, 135)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
          .addComponent(jLabel1)
          .addComponent(jLabel2)
          .addGroup(layout.createSequentialGroup()
            .addGap(1, 1, 1)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
              .addComponent(jLabel3)
              .addComponent(jLabel4))))
        .addGap(38, 38, 38)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
          .addComponent(firstname, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, 312, Short.MAX_VALUE)
          .addComponent(lastname, javax.swing.GroupLayout.Alignment.TRAILING)
          .addComponent(branchname)
          .addComponent(enrollment))
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
      .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jLabel5)
        .addGap(272, 272, 272))
   );
   layout.setVerticalGroup(
layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
      .addGroup(layout.createSequentialGroup()
        .addGap(27, 27, 27)
        .addComponent(jLabel5)
        .addGap(18, 18, 18)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
          .addComponent(jLabel1, javax.swing.GroupLayout.Alignment.TRAILING)
```

```
.addComponent(enrollment,
                                           javax.swing.GroupLayout.PREFERRED SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, javax.swing.GroupLayout.PREFERRED SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
.addComponent(jLabel2)
          .addComponent(firstname, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
          .addComponent(lastname, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, javax.swing.GroupLayout.PREFERRED SIZE)
          .addComponent(jLabel3))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
          .addComponent(branchname,
                                           javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
          .addComponent(jLabel4,
                                   javax.swing.GroupLayout.PREFERRED_SIZE,
                                                                               22,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(34, 34, 34)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
.addComponent(btninsert)
          .addComponent(btnupdate)
.addComponent(btndelete))
        .addGap(18, 18, 18)
        .addComponent(btnload)
        .addGap(26, 26, 26)
        .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 106, Short.MAX_VALUE)
.addContainerGap())
   );
    pack();
 }// </editor-fold>
```

```
void
                      btnloadActionPerformed(java.awt.event.ActionEvent evt)
                                                                                 {
  private
// TODO add your handling code here:
          con_db();
 }
  private void btninsertActionPerformed(java.awt.event.ActionEvent evt) {
   // TODO add your handling code here:
                                                       document.put("firstname",firstname.getText());
    BasicDBObject document = new BasicDBObject();
document.put("lastname",lastname.getText());
                                                 document.put("branchname",branchname.getText());
document.put("enrollment",enrollment.getText());
    table.insert(document);
firstname.setText("");
                         lastname.setText("");
branchname.setText("");
                           enrollment.setText("");
   System.out.println("Successful");
 }
  private void btnupdateActionPerformed(java.awt.event.ActionEvent evt) {
     // TODO add your handling code here:
      enrollment.setEditable(false);
     BasicDBObject search = new BasicDBObject();
String eno1 = enrollment.getText().toString();
search.put("enrollment",eno1);
      BasicDBObject
                                                        BasicDBObject();
                        newDocument
                                               new
newDocument.put("enrollment",eno1
                                                                      );
newDocument.put("firstname",firstname.getText().toString()
                                                                      );
newDocument.put("lastname",lastname.getText().toString()
                                                                      );
newDocument.put("branchname",branchname.getText().toString() );
      BasicDBObject updateObj = new BasicDBObject();
```

```
updateObj.put("$set",newDocument);
                                            table.update(search,newDocument
);
      firstname.setText("");
lastname.setText("");
                           branchname.setText("");
                                                          enrollment.setText("");
  }
  private void btndeleteActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    BasicDBObject search = new BasicDBObject();
                                                    String
eno1 = enrollment.getText().toString();
search.put("enrollment",eno1);
                                   table.remove(search);
                              lastname.setText("");
    firstname.setText("");
branchname.setText("");
enrollment.setText("");
  }
  private void jTableMouseClicked(java.awt.event.MouseEvent evt) {
// TODO add your handling code here:
                                         int pindex = jTable.getSelectedRow();
enrollment.setText(tb.getValueAt(pindex,0 ).toString());
firstname.setText(tb.getValueAt(pindex,1).toString());
lastname.setText(tb.getValueAt(pindex,2).toString());
branchname.setText(tb.getValueAt(pindex,3).toString());
  }
```

Practical-8 No sql **/**** * @param args the command line arguments */ public static void main(String args[]) { /* Set the Nimbus look and feel */ //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) "> /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel. * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html */ { (javax.swing.UIManager.LookAndFeelInfo info javax.swing.UIManager.getInstalledLookAndFeels()) { { ("Nimbus".equals(info.getName())) javax.swing.UIManager.setLookAndFeel(info.getClassName()); break; } } catch (ClassNotFoundException ex) { java.util.logging.Logger.getLogger(Jay.class.getName()).log(java.util.logging.Level.SEVERE, null, ex); } { catch (InstantiationException ex) java.util.logging.Logger.getLogger(Jay.class.getName()).log(java.util.logging.Level.SEVERE, null, ex); } catch (IllegalAccessException ex) { java.util.logging.Logger.getLogger(Jay.class.getName()).log(java.util.logging.Level.SEVERE, null, ex); { } (javax.swing.UnsupportedLookAndFeelException catch ex) java.util.logging.Logger.getLogger(Jay.class.getName()).log(java.util.logging.Level.SEVERE, null, ex); } //</editor-fold> /* Create and display the form */ java.awt.EventQueue.invokeLater(() { new Jay().setVisible(true); **})**;

}

```
// Variables declaration - do not modify
  private javax.swing.JTextField branchname;
private javax.swing.JButton btndelete; private
javax.swing.JButton btninsert;
                                private
javax.swing.JButton btnload; private
javax.swing.JButton btnupdate; private javax.swing.JTextField
enrollment; private javax.swing.JTextField firstname; private
javax.swing.JLabel jLabel1; private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3; private javax.swing.JLabel
jLabel4;
              private javax.swing.JLabel jLabel5;
                                                       private
javax.swing.JScrollPane jScrollPane1;
                                                       private
javax.swing.JTable jTable;
                                private javax.swing.JTextField
lastname;
  // End of variables declaration
}
```





