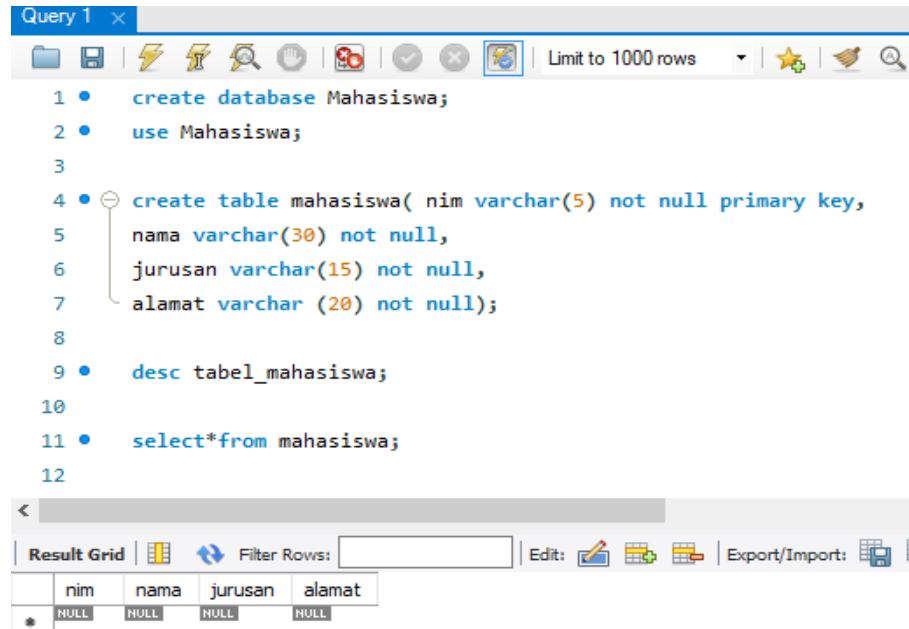


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## 1. Pembuatan Database dan Table



## 2. Desain Form

The screenshot shows a web form titled "DATA MAHASISWA". The form has a blue header bar with the title. Below the header, there are four input fields with labels: NIM, Nama, Jurusan, and Alamat. The NIM field has an "Edit" button next to it. The Nama field has a "Tambah" button next to it. The Jurusan field is a dropdown menu with "IT" selected. The Alamat field is a text area with a vertical scrollbar. Below these fields, there is a search bar with a "cari" button. At the bottom of the form, there is a table with four columns: Title 1, Title 2, Title 3, and Title 4. The table has five rows, all of which are empty. Below the table, there are three buttons: Simpan, Hapus, and Keluar.

Title 1	Title 2	Title 3	Title 4

### 3. Source Code:

Untuk mengkoneksikan ke database

```
package koneksi;
import com.mysql.jdbc.Driver;
import java.sql.DriverManager;
import javax.swing.JOptionPane;
import java.sql.Connection;
import java.sql.SQLException;

/**
 *
 * @author user
 */
public class konek {
    static Connection Koneksi;
    public static Connection getConnection(){
        try{
            Koneksi = DriverManager.getConnection("jdbc:mysql://localhost/Mahasiswa","root","");
        } catch (Exception t){
            JOptionPane.showMessageDialog(null, "Koneksi Gagal!");
        }
        return Koneksi;
    }
}

import com.mysql.jdbc.Statement;
import java.awt.HeadlessException;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import koneksi.konek;
import javax.swing.table.DefaultTableModel;
```

```

public class Form extends javax.swing.JFrame {

    public Form() {
        initComponents();
        datatable();
    }

    private void datatable(){
        DefaultTableModel tbl = new DefaultTableModel();
        tbl.addColumn("NIM");
        tbl.addColumn("Nama");
        tbl.addColumn("Jurusan");
        tbl.addColumn("Alamat");
        table.setModel(tbl);
        try{
            Statement statement = (Statement) konek.getConnection().createStatement();
            ResultSet res = statement.executeQuery("select * from mahasiswa");
            while(res.next()){
                tbl.addRow(new Object[]{
                    res.getString("nim"),
                    res.getString("nama"),
                    res.getString("jurusan"),
                    res.getString("alamat"),
                });
                table.setModel(tbl);
            }
        }catch (Exception e){
            JOptionPane.showMessageDialog(rootPane, "Gagal");
        }
    }
}

```

```

private void keluarActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    dispose();
}

```

```

private void btnsimpanActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try {
        String sql = "INSERT INTO mahasiswa VALUES ('"+txtnim.getText()+"','"+txtnama.getText()+"','"+
            + "'"+cbjurusan.getSelectedIndex()+"','"+txtalamat.getText()+"')";
        java.sql.Connection conn=(Connection)konek.getConnection();
        java.sql.PreparedStatement pst=conn.prepareStatement(sql);
        pst.execute();
        JOptionPane.showMessageDialog(null, "Penyimpanan Data Berhasil");
    } catch (Exception e) {
        JOptionPane.showMessageDialog(this, e.getMessage());
    }
    datatable();
}

```

```

private void btneditActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    if (btnedit.getText() == "btnedit") {
        txtnim.requestFocus();
    } else {
        String nim = txtnim.getText();
        String nama = txtnama.getText();
        String jurusan = (String) cbjurusan.getSelectedItem();
        String alamat = txtalamat.getText();

        try {
            String sql = "UPDATE mahasiswa SET nama = '" + txtnama.getText() + "', nim = '" + txtnim.getText() + "'"
                + ", jurusan = '" + cbjurusan.getSelectedItem() + "'"
                + "alamat= '" + txtalamat.getText() + "' WHERE nim = '" + txtnim.getText() + "'";

            java.sql.Connection conn = (Connection) konek.getConnection();
            java.sql.PreparedStatement pst = conn.prepareStatement(sql);
            pst.execute();
            JOptionPane.showMessageDialog(null, "data berhasil di edit");
        } catch (Exception e) {
            JOptionPane.showMessageDialog(null, "Perubahan Data Gagal" + e.getMessage());
        }

        datatable();
    }
}

```

```

private void btncariActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try {
        Statement statement = (Statement) konek.getConnection().createStatement();
        ResultSet res = statement.executeQuery("select * from mahasiswa where " + "nim like '%" +
            txtcari.getText() + "%' OR " + "nama like '%" + txtcari.getText() + "%'");

        DefaultTableModel tbl = new DefaultTableModel();
        tbl.addColumn("NIM");
        tbl.addColumn("Nama");
        tbl.addColumn("Jurusan");
        tbl.addColumn("Alamat");

        table.setModel(tbl);
        while (res.next()) {
            tbl.addRow(new Object[] {
                res.getString("nim"),
                res.getString("nama"),
                res.getString("jurusan"),
                res.getString("alamat"),
            });
        }
    } catch (SQLException e) {
        JOptionPane.showMessageDialog(rootPane, "Error");
    }
}

```

```

private void tableMouseClicked(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:
    int i = table.getSelectedRow();
    if(i==1){
        return;
    }
    String nim = (String) table.getValueAt(i, 0);
    txtnim.setText(nim);
    String nama = (String) table.getValueAt(i, 1);
    txtnama.setText(nama);
    String alamat = (String) table.getValueAt(i, 2);
    txtalamat.setText(alamat);
    String jurusan = (String) table.getValueAt(i, 3);
    cbjurusan.setSelectedItem("Teknik Informatika");
}

```

```

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    Look and feel setting code (optional)

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new Form().setVisible(true);
        }
    });
}

```

4. ketika Program diinputkan

## DATA MAHASISWA

NIM

Nama

Jurusan

Alamat

NIM	Nama	Jurusan	Alamat
123	ajja	IT	urip