```
package java_project_1_2;
public class Product {
  private int id;
  private String name;
  private float price;
  private String addDate;
  private byte[] picture;
  public Product(int pid, String pname, float pprice, String pAddDate, byte[] pimg)
    this.id = pid;
    this.name = pname;
    this.price = pprice;
    this.addDate = pAddDate;
    this.picture = pimg;
  }
  public int getId()
    return id;
  public String getName()
    return name;
  public float getPrice()
    return price;
  public String getAddDate()
    return addDate;
  public byte[] getImage()
    return picture;
}
```

EndProduct Class

```
package java_project_1_2;
import java.awt.lmage;
import java.io.File;
import java.io.FileInputStream;
import java.io.InputStream;
import java.sql.Connection;
import java.sql.DriverManager:
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.text.ParseException;
import java.text.SimpleDateFormat;
import java.util.ArrayList;
import java.util.Date;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.imageio.lmagelO;
import javax.swing.lmagelcon;
import javax.swing.JFileChooser;
import javax.swing.JOptionPane;
import javax.swing.filechooser.FileNameExtensionFilter;
import javax.swing.table.DefaultTableModel;
/**
* @author 1BestCsharp.blogspot.com
public class Main_Window extends javax.swing.JFrame {
  /**
   * Creates new form Main Window
  public Main_Window() {
     initComponents();
     Show_Products_In_JTable();
  }
  String ImgPath = null;
  int pos = 0;
   // Function To Connect To MySQL Database
  public Connection getConnection()
    Connection con = null;
    try {
      con =
DriverManager.getConnection("jdbc:mysql://localhost/products_db2","root","");
      return con;
```

```
} catch (SQLException ex) {
      Logger.getLogger(Main_Window.class.getName()).log(Level.SEVERE, null, ex);
      return null;
    }
  }
  // Check Input Fields
  public boolean checkInputs()
  {
    if(
        txt_name.getText() == null
      || txt_price.getText() == null
      || txt_AddDate.getDate() == null
     ){
      return false;
    else{
      try{
         Float.parseFloat(txt_price.getText());
         return true;
       }catch(Exception ex)
         return false;
      }
    }
  }
 // Function To Resize The Image To Fit Into JLabel
  public ImageIcon ResizeImage(String imagePath, byte[] pic)
    ImageIcon myImage = null;
    if(imagePath != null)
      myImage = new ImageIcon(imagePath);
    }else{
      myImage = new ImageIcon(pic);
    Image img = myImage.getImage();
    Image img2 = img.getScaledInstance(lbl_image.getWidth(), lbl_image.getHeight(),
Image.SCALE_SMOOTH);
    ImageIcon image = new ImageIcon(img2);
    return image;
  }
  // Display Data In JTable:
     1 - Fill ArrayList With The Data
```

```
public ArrayList<Product> getProductList()
       ArrayList<Product> productList = new ArrayList<Product>();
       Connection con = getConnection();
       String query = "SELECT * FROM products";
       Statement st:
       ResultSet rs:
    try {
       st = con.createStatement();
       rs = st.executeQuery(query);
       Product product:
       while(rs.next())
         product = new
Product(rs.getInt("id"),rs.getString("name"),Float.parseFloat(rs.getString("price")),rs.get
String("add_date"),rs.getBytes("image"));
         productList.add(product);
       }
    } catch (SQLException ex) {
       Logger.getLogger(Main_Window.class.getName()).log(Level.SEVERE, null, ex);
    return productList;
  }
       2 - Populate The JTable
  public void Show_Products_In_JTable()
    ArrayList<Product> list = getProductList();
    DefaultTableModel model = (DefaultTableModel)JTable_Products.getModel();
    // clear jtable content
    model.setRowCount(0);
    Object[] row = new Object[4];
    for(int i = 0; i < list.size(); i++)
    {
       row[0] = list.get(i).getId();
       row[1] = list.get(i).getName();
       row[2] = list.get(i).getPrice();
       row[3] = list.get(i).getAddDate();
       model.addRow(row);
    }
  }
```

```
// Show Data In Inputs
  public void ShowItem(int index)
  {
      txt_id.setText(Integer.toString(getProductList().get(index).getId()));
      txt_name.setText(getProductList().get(index).getName());
      txt_price.setText(Float.toString(getProductList().get(index).getPrice()));
    try {
     Date addDate = null;
      addDate = new SimpleDateFormat("vvvv-MM-
dd'').parse((String)getProductList().get(index).getAddDate());
      txt AddDate.setDate(addDate);
    } catch (ParseException ex) {
      Logger.getLogger(Main Window.class.getName()).log(Level.SEVERE, null, ex);
    lbl_image.setIcon(ResizeImage(null, getProductList().get(index).getImage()));
  }
   * 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")
  // <editor-fold defaultstate="collapsed" desc="Generated Code">
  private void initComponents() {
    ¡Panel1 = new javax.swing.JPanel();
    ¡Label1 = new javax.swing.JLabel();
    iLabel2 = new javax.swing.JLabel():
    jLabel3 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();
    txt name = new javax.swing.JTextField();
    txt id = new javax.swing.JTextField();
    txt price = new javax.swing.JTextField();
    txt AddDate = new com.toedter.calendar.JDateChooser();
    lbl_image = new javax.swing.JLabel();
    jScrollPane1 = new javax.swing.JScrollPane();
    JTable_Products = new javax.swing.JTable();
    Btn_Choose_Image = new javax.swing.JButton();
    ¡Button2 = new javax.swing.JButton();
    ¡Button3 = new javax.swing.JButton();
    Btn_Insert = new javax.swing.JButton();
    Btn First = new javax.swing.JButton();
    Btn_Previous = new javax.swing.JButton();
    Btn_Last = new javax.swing.JButton();
    Btn Next = new javax.swing.JButton();
```

```
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT ON CLOSE);
¡Panel1.setBackground(new java.awt.Color(255, 255, 204));
jLabel1.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
¡Label1.setText("ID:");
iLabel2.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
iLabel2.setText("Name:");
jLabel3.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jLabel3.setText("Price:");
jLabel4.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
¡Label4.setText("Add Date:");
jLabel5.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
iLabel5.setText("Image:"):
txt_name.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
txt_name.setPreferredSize(new java.awt.Dimension(59, 50));
txt id.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
txt id.setEnabled(false):
txt id.setPreferredSize(new java.awt.Dimension(59, 50));
txt_price.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
txt price.setPreferredSize(new java.awt.Dimension(59, 50));
txt_AddDate.setDateFormatString("yyyy-MM-dd");
txt AddDate.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
lbl_image.setBackground(new java.awt.Color(204, 255, 255));
lbl_image.setOpaque(true);
JTable_Products.setModel(new javax.swing.table.DefaultTableModel(
  new Object [][] {
  },
  new String [] {
    "ID", "Name", "Price", "Add Date"
));
JTable_Products.addMouseListener(new java.awt.event.MouseAdapter() {
  public void mouseClicked(java.awt.event.MouseEvent evt) {
    JTable_ProductsMouseClicked(evt);
});
jScrollPane1.setViewportView(JTable_Products);
Btn Choose Image.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
Btn_Choose_Image.setText("Choose Image");
```

```
Btn Choose Image.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         Btn Choose ImageActionPerformed(evt);
    });
    ¡Button2.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
    iButton2.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/JAVA VIDEOS TUTORIALS/icons/Re
new.png"))); // NOI18N
    ¡Button2.setText("Update");
    iButton2.setIconTextGap(15);
    jButton2.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         ¡Button2ActionPerformed(evt);
    });
    jButton3.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
    ¡Button3.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/JAVA_VIDEOS_TUTORIALS/icons/del
ete.png"))); // NOI18N
    ¡Button3.setText("Delete");
     jButton3.setIconTextGap(15);
    ¡Button3.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         ¡Button3ActionPerformed(evt);
    });
     Btn Insert.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
     Btn Insert.setIcon(new
javax.swing.lmagelcon(getClass().getResource("/JAVA_VIDEOS_TUTORIALS/icons/ad
d.png"))); // NOI18N
     Btn_Insert.setText("Insert");
     Btn_Insert.setIconTextGap(15);
     Btn Insert.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         Btn InsertActionPerformed(evt);
    });
     Btn_First.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
     Btn First.setIcon(new
javax.swing.lmagelcon(getClass().getResource("/JAVA_VIDEOS_TUTORIALS/icons/first
.png"))); // NOI18N
     Btn_First.setText("First");
     Btn First.setIconTextGap(15);
     Btn_First.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         Btn FirstActionPerformed(evt);
```

```
});
    Btn Previous.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
    Btn Previous.setIcon(new
javax.swing.lmagelcon(getClass().getResource("/JAVA_VIDEOS_TUTORIALS/icons/pre
vious.png"))); // NOI18N
    Btn_Previous.setText("Previous");
    Btn Previous.setIconTextGap(15):
    Btn Previous.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         Btn PreviousActionPerformed(evt):
    });
    Btn Last.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
    Btn_Last.setIcon(new
javax.swing.lmagelcon(getClass().getResource("/JAVA_VIDEOS_TUTORIALS/icons/last
.png"))); // NOI18N
    Btn_Last.setText("Last");
    Btn Last.setIconTextGap(15);
    Btn_Last.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         Btn LastActionPerformed(evt);
    });
    Btn_Next.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
    Btn Next.setIcon(new
javax.swing.lmagelcon(getClass().getResource("/JAVA_VIDEOS_TUTORIALS/icons/nex
t.png"))); // NOI18N
    Btn Next.setText("Next");
    Btn Next.setIconTextGap(15):
    Btn_Next.addActionListener(new java.awt.event.ActionListener() {
       public void actionPerformed(java.awt.event.ActionEvent evt) {
         Btn_NextActionPerformed(evt);
       }
    });
    javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
    ¡Panel1.setLayout(¡Panel1Layout);
    jPanel1Layout.setHorizontalGroup(
       jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADIN
G)
       .addGroup(jPanel1Layout.createSequentialGroup()
         .addGap(33, 33, 33)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Align
ment.TRAILING)
            .addComponent(jLabel1)
            .addComponent(jLabel2)
            .addComponent(jLabel3)
            .addComponent(jLabel4)
            .addComponent(jLabel5))
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATE
D)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Align
ment.LEADING, false)
           .addComponent(Btn_Choose_Image,
javax.swing.GroupLayout.DEFAULT_SIZE, 227, Short.MAX_VALUE)
           .addComponent(txt_AddDate,
javax.swing.GroupLayout.PREFERRED SIZE, 125,
javax.swing.GroupLayout.PREFERRED SIZE)
           .addComponent(txt_id, javax.swing.GroupLayout.PREFERRED_SIZE, 109,
javax.swing.GroupLayout.PREFERRED SIZE)
           .addComponent(txt_name, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
           .addComponent(txt_price, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT SIZE, Short.MAX VALUE)
           .addComponent(lbl_image, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED.
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
         .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
         .addContainerGap())
      .addGroup(jPanel1Layout.createSequentialGroup()
         .addContainerGap()
         .addComponent(Btn Insert)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATE
D)
         .addComponent(jButton2)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATE
D)
         .addComponent(jButton3)
         .addGap(45, 45, 45)
         .addComponent(Btn First)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addComponent(Btn_Next)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
         .addComponent(Btn Previous)
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATE
D)
         .addComponent(Btn_Last)
         .addContainerGap(javax.swing.GroupLayout.DEFAULT SIZE,
Short.MAX_VALUE))
    ¡Panel1Layout.setVerticalGroup(
      jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADIN
G)
      .addGroup(jPanel1Layout.createSequentialGroup()
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Align
ment.LEADING)
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addGap(31, 31, 31)
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.
Alignment.BASELINE)
               .addComponent(txt id, javax.swing.GroupLayout.PREFERRED SIZE,
40. javax.swing.GroupLayout.PREFERRED SIZE)
               .addComponent(jLabel1))
             .addGap(9, 9, 9)
             .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.
Alignment.BASELINE)
               .addComponent(txt_name,
javax.swing.GroupLayout.PREFERRED_SIZE, 40,
javax.swing.GroupLayout.PREFERRED_SIZE)
               .addComponent(jLabel2))
             .addGap(14, 14, 14)
             .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.
Alignment.BASELINE)
               .addComponent(jLabel3)
               .addComponent(txt_price,
javax.swing.GroupLayout.PREFERRED_SIZE, 40,
javax.swing.GroupLayout.PREFERRED_SIZE))
             .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.
Alignment.LEADING)
               .addGroup(jPanel1Layout.createSequentialGroup()
                  .addGap(21, 21, 21)
                  .addComponent(iLabel4))
               .addGroup(jPanel1Layout.createSequentialGroup()
                  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.U
NRELATED)
                 .addComponent(txt AddDate,
javax.swing.GroupLayout.PREFERRED SIZE, 41,
javax.swing.GroupLayout.PREFERRED_SIZE)))
             .addGap(18, 18, 18)
             .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.
Alignment.BASELINE)
               .addComponent(jLabel5)
               .addComponent(lbl_image,
javax.swing.GroupLayout.PREFERRED_SIZE, 167,
javax.swing.GroupLayout.PREFERRED SIZE))
             .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELAT
ED)
             .addComponent(Btn_Choose_Image,
javax.swing.GroupLayout.PREFERRED_SIZE, 36,
javax.swing.GroupLayout.PREFERRED SIZE))
           .addGroup(jPanel1Layout.createSequentialGroup()
             .addContainerGap()
             .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))
         .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
54, Short.MAX VALUE)
         .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Align
ment.BASELINE)
```

```
.addComponent(Btn Insert, javax.swing.GroupLayout.PREFERRED SIZE,
40, javax.swing.GroupLayout.PREFERRED_SIZE)
           .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE,
40. javax.swing.GroupLayout.PREFERRED SIZE)
           .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE,
40, javax.swing.GroupLayout.PREFERRED SIZE)
           .addComponent(Btn_First, javax.swing.GroupLayout.PREFERRED_SIZE,
40. javax.swing.GroupLayout.PREFERRED SIZE)
           .addComponent(Btn Next, javax.swing.GroupLayout.PREFERRED SIZE,
40, javax.swing.GroupLayout.PREFERRED_SIZE)
           .addComponent(Btn Previous,
javax.swing.GroupLayout.PREFERRED_SIZE, 40,
javax.swing.GroupLayout.PREFERRED_SIZE)
           .addComponent(Btn Last, javax.swing.GroupLayout.PREFERRED SIZE,
40, javax.swing.GroupLayout.PREFERRED SIZE))
         .addGap(31, 31, 31))
    );
    javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
       layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    layout.setVerticalGroup(
       layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
       .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    pack();
  }// </editor-fold>
// Button Browse Image From Your Computer
  private void Btn Choose ImageActionPerformed(java.awt.event.ActionEvent evt)
    JFileChooser file = new JFileChooser();
    file.setCurrentDirectory(new File(System.getProperty("user.home")));
    FileNameExtensionFilter filter = new FileNameExtensionFilter("*.images",
"jpg","png");
    file.addChoosableFileFilter(filter);
    int result = file.showSaveDialog(null);
    if(result == JFileChooser.APPROVE OPTION)
      File selectedFile = file.getSelectedFile();
      String path = selectedFile.getAbsolutePath();
      lbl image.setIcon(ResizeImage(path, null));
      ImgPath = path;
```

```
}
    else{
      System.out.println("No File Selected");
  }
  // Button Insert Data Into MySOL Database
  // 1 - Check If The imgPath Is Not Null And The Inputs Are Not Empty
  // 2 - Insert The Data
  private void Btn_InsertActionPerformed(java.awt.event.ActionEvent evt)
{
    if(checkInputs() && ImgPath != null)
      try {
         Connection con = getConnection();
         PreparedStatement ps = con.prepareStatement("INSERT INTO
products(name,price,add date,image)"
             + "values(?,?,?,?) ");
         ps.setString(1, txt_name.getText());
         ps.setString(2, txt_price.getText());
         SimpleDateFormat dateFormat = new SimpleDateFormat("vyvy-MM-dd");
         String addDate = dateFormat.format(txt_AddDate.getDate());
         ps.setString(3, addDate);
         InputStream img = new FileInputStream(new File(ImgPath));
         ps.setBlob(4, img);
         ps.executeUpdate();
         Show_Products_In_JTable();
         JOptionPane.showMessageDialog(null, "Data Inserted");
      } catch (Exception ex) {
         JOptionPane.showMessageDialog(null, ex.getMessage());
    }else{
      JOptionPane.showMessageDialog(null, "One Or More Field Are Empty");
    // only for test
    System.out.println("Name => "+txt_name.getText());
    System.out.println("Price => "+txt price.getText());
    System.out.println("Image => "+ImgPath);
  }
  // Button Update Data From MySQL Database
  // 1 - Check If Inputs Is Not Null
      If The imgPath Is Not Null Update Also The Image
      else don't update the Image
  // 2 - Update The Data
  private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
```

```
if(checkInputs() && txt_id.getText() != null)
  String UpdateOuery = null;
  PreparedStatement ps = null;
  Connection con = getConnection();
  // update without image
  if(ImgPath == null)
    try {
      UpdateQuery = "UPDATE products SET name = ?, price = ?"
           + '', add_date = ? WHERE id = ?'';
      ps = con.prepareStatement(UpdateQuery);
      ps.setString(1, txt_name.getText());
      ps.setString(2, txt_price.getText());
      SimpleDateFormat dateFormat = new SimpleDateFormat("yyyy-MM-dd");
      String addDate = dateFormat.format(txt_AddDate.getDate());
      ps.setString(3, addDate);
      ps.setInt(4, Integer.parseInt(txt_id.getText()));
      ps.executeUpdate();
      Show_Products_In_JTable();
      JOptionPane.showMessageDialog(null, "Product Updated");
    } catch (SQLException ex) {
      Logger.getLogger(Main_Window.class.getName()).log(Level.SEVERE, null, ex);
  // update With Image
  else{
    try{
    InputStream img = new FileInputStream(new File(ImgPath));
     UpdateQuery = "UPDATE products SET name = ?, price = ?"
           + ", add_date = ?, image = ? WHERE id = ?";
     ps = con.prepareStatement(UpdateQuery);
      ps.setString(1, txt_name.getText());
      ps.setString(2, txt_price.getText());
      SimpleDateFormat dateFormat = new SimpleDateFormat("yyyy-MM-dd");
      String addDate = dateFormat.format(txt_AddDate.getDate());
      ps.setString(3, addDate);
```

```
ps.setBlob(4, img);
           ps.setInt(5, Integer.parseInt(txt id.getText()));
           ps.executeUpdate();
           Show Products In JTable();
          JOptionPane.showMessageDialog(null, "Product Updated");
         }catch(Exception ex)
          JOptionPane.showMessageDialog(null, ex.getMessage());
      }
    }else{
      JOptionPane.showMessageDialog(null, "One Or More Fields Are Empty Or
Wrong");
    }
  }
  // Button Delete The Data From MySQL Database
  private void jButton3ActionPerformed(java.awt.event.ActionEvent evt)
{
    if(!txt id.getText().equals(""))
      try {
        Connection con = getConnection();
        PreparedStatement ps = con.prepareStatement("DELETE FROM products
WHERE id = ?'');
        int id = Integer.parseInt(txt_id.getText());
        ps.setInt(1, id);
        ps.executeUpdate();
        Show_Products_In_JTable();
        JOptionPane.showMessageDialog(null, "Product Deleted");
      } catch (SQLException ex) {
        Logger.getLogger(Main Window.class.getName()).log(Level.SEVERE, null, ex);
        JOptionPane.showMessageDialog(null, "Product Not Deleted");
      }
    }else{
      JOptionPane.showMessageDialog(null, "Product Not Deleted : No Id To Delete");
  }
  // JTable Mouse Clicked
  // Display The Selected Row Data Into JTextFields
  // And The Image Into JLabel
  private void JTable_ProductsMouseClicked(java.awt.event.MouseEvent evt)
{
```

```
int index = JTable_Products.getSelectedRow();
    ShowItem(index);
  }
  // Button First Show The First Record
  private void Btn_FirstActionPerformed(java.awt.event.ActionEvent evt)
   pos = 0;
    ShowItem(pos);
  // Button Last Show The Last Record
  private void Btn_LastActionPerformed(java.awt.event.ActionEvent evt)
   pos = getProductList().size()-1;
    ShowItem(pos);
// Button Next Show The Next Record
  private void Btn_NextActionPerformed(java.awt.event.ActionEvent evt)
    pos++;
    if(pos >= getProductList().size())
      pos = getProductList().size()-1;
    ShowItem(pos);
// Button Previous Show The Previous Record
  private void Btn_PreviousActionPerformed(java.awt.event.ActionEvent evt)
{
    pos--;
    if(pos < 0)
      pos = 0;
    ShowItem(pos);
  }
   * @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
    try {
       for (javax.swing.UIManager.LookAndFeelInfo info:
javax.swing.UIManager.getInstalledLookAndFeels()) {
         if ("Nimbus".equals(info.getName())) {
            javax.swing.UIManager.setLookAndFeel(info.getClassName());
    } catch (ClassNotFoundException ex) {
       java.util.logging.Logger.getLogger(Main Window.class.getName()).log(java.util.lo
gging.Level.SEVERE, null, ex);
     } catch (InstantiationException ex) {
       java.util.logging.Logger.getLogger(Main_Window.class.getName()).log(java.util.lo
gging.Level.SEVERE, null, ex);
     } catch (IllegalAccessException ex) {
       java.util.logging.Logger.getLogger(Main_Window.class.getName()).log(java.util.lo
gging.Level.SEVERE, null, ex);
     } catch (javax.swing.UnsupportedLookAndFeelException ex) {
       java.util.logging.Logger.getLogger(Main_Window.class.getName()).log(java.util.lo
gging.Level.SEVERE, null, ex);
    //</editor-fold>
    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
       public void run() {
         new Main_Window().setVisible(true);
    });
  // Variables declaration - do not modify
  private javax.swing.JButton Btn_Choose_Image;
  private javax.swing.JButton Btn First;
  private javax.swing.JButton Btn_Insert;
  private javax.swing.JButton Btn_Last;
  private javax.swing.JButton Btn_Next;
  private javax.swing.JButton Btn_Previous;
  private javax.swing.JTable JTable_Products;
  private javax.swing.JButton jButton2;
  private javax.swing.JButton jButton3;
  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.JPanel jPanel1;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JLabel lbl_image;
private com.toedter.calendar.JDateChooser txt_AddDate;
private javax.swing.JTextField txt_id;
private javax.swing.JTextField txt_name;
private javax.swing.JTextField txt_price;
// End of variables declaration
}
```