Assignment 03

Aim: To display the functionalities of the mini project.

1) Welcome Page

Code:

```java
package login1;
import java.awt.BorderLayout;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import javax.swing.JLabel;
import java.awt.Font;
import java.awt.Color;
import javax.swing.SwingConstants;
import javax.swing.JScrollPane;
public class wel extends JFrame {

    private JPanel contentPane;

    /**
     * Launch the application.
     */
    public static void main(String[] args) {
        EventQueue.invokeLater(new
Runnable() {
            public void run() {
                try {
                    wel
frame = new wel();
            frame.setVisible(true);
                } catch
(Exception e) {
                e.printStackTrace();
                }
            }
        });
    }
    /**
     * Create the frame.
     */
    public wel() {
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 704,
498);
        setTitle("Welcome Page");
        contentPane = new JPanel();
        contentPane.setBackground(new
Color(188, 143, 143));
        contentPane.setBorder(new
EmptyBorder(5, 5, 5, 5));
        setContentPane(contentPane);
        contentPane.setLayout(null);

        JLabel lblNewLabel = new
JLabel("FOOD ORDERING SYSTEM");
        lblNewLabel.setBackground(new
Color(119, 136, 153));
        lblNewLabel.setVerticalAlignment(SwingConstants.TOP);
        lblNewLabel.setFont(new
Font("Times New Roman", Font.BOLD, 40));
        lblNewLabel.setBounds(86,
37, 594, 40);
    contentPane.add(lblNewLabel);
        JLabel lblNewLabel_1 = new
JLabel("Press the button to continue...");
        lblNewLabel_1.setFont(new
Font("Times New Roman", Font.ITALIC, 19));
        lblNewLabel_1.setBounds(26,
152, 284, 22);
    contentPane.add(lblNewLabel_1);
            JButton
btnNewButton = new JButton("WELCOME");
        btnNewButton.setBounds(167, 205,
342, 95);
        contentPane.add(btnNewButton);
        btnNewButton.setBackground(new
Color(255, 255, 255));
            btnNewButton.setFont(new
Font("Times New Roman", Font.BOLD, 33));

        btnNewButton.addActionListener(new ActionListener() {
```
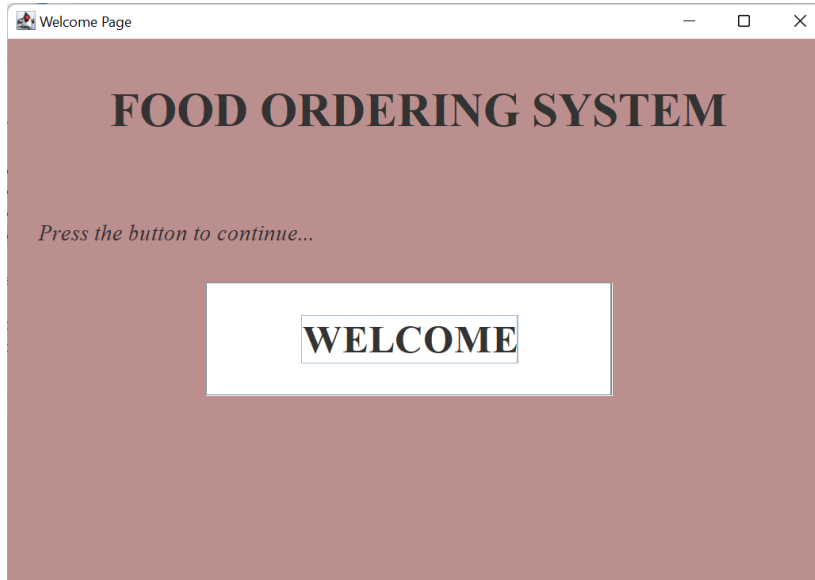
```java
        public void
actionPerformed(ActionEvent e) {
                                login l
= new login();
        l.show();
                                                  dispose();
                                          }
                                      });
                              }
                          }
```


2) LogIn Page:

Code:

```java
package login1;
import java.awt.BorderLayout;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import java.awt.Font;
import javax.swing.SwingConstants;
import javax.swing.JTextField;
import javax.swing.JPasswordField;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.awt.Color;
public class login extends JFrame {
        private static final long
serialVersionUID = 1L;
        private JPanel contentPane;
        private JTextField textField;
        private JPasswordField passwordField;
        public static void main(String[] args) {

                EventQueue.invokeLater(new
Runnable() {
                        public void run() {
                                try {
                                        login
frame = new login();

                        frame.setVisible(true);
                                } catch
(Exception e) {

                        e.printStackTrace();
                                }
                        }
                    });
                }
                public login() {

                setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
                        setBounds(100, 100, 605,
467);
                        setTitle("LogIn Page");
                        contentPane = new JPanel();
```

```java
contentPane.setBackground(new Color(188, 143, 143));
contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

setContentPane(contentPane);
contentPane.setLayout(null);
JLabel lblNewLabel = new JLabel("LOGIN PAGE");
lblNewLabel.setFont(new Font("Times New Roman", Font.BOLD, 37));
lblNewLabel.setBounds(139, 33, 388, 60);

contentPane.add(lblNewLabel);
JLabel lblUsername = new JLabel("USERNAME");
lblUsername.setFont(new Font("Times New Roman", Font.ITALIC, 24));
lblUsername.setBounds(22, 139, 171, 37);

contentPane.add(lblUsername);
JLabel lblNewLabel_1_1 = new JLabel("PASSWORD");

lblNewLabel_1_1.setFont(new Font("Times New Roman", Font.ITALIC, 24));

lblNewLabel_1_1.setBounds(22, 223, 171, 22);

contentPane.add(lblNewLabel_1_1);
textField = new JTextField();
textField.setBounds(203, 149, 211, 20);

contentPane.add(textField);
textField.setColumns(10);
passwordField = new JPasswordField();

passwordField.setEchoChar('*');

passwordField.setBounds(203, 226, 211, 20);

contentPane.add(passwordField);
final JButton log = new JButton("LOGIN");

log.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        String uname = textField.getText();
        String pwrd = passwordField.getText();

        if( uname.equals("admin")&& pwrd.equals("yo")) {
            f1 f = new f1();

            f.show();

            dispose();
        }
        else {

            JOptionPane.showMessageDialog(log, "Invalid Entry");
        }
    }
});
log.setFont(new Font("Times New Roman", Font.BOLD, 27));
log.setBounds(54, 329, 174, 52);
contentPane.add(log);
JButton btnNewButton_1 = new JButton("CANCEL");

btnNewButton_1.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        dispose();
    }
});

btnNewButton_1.setFont(new Font("Times New Roman", Font.BOLD, 27));

btnNewButton_1.setBounds(316, 329, 171, 52);

contentPane.add(btnNewButton_1);
}
```
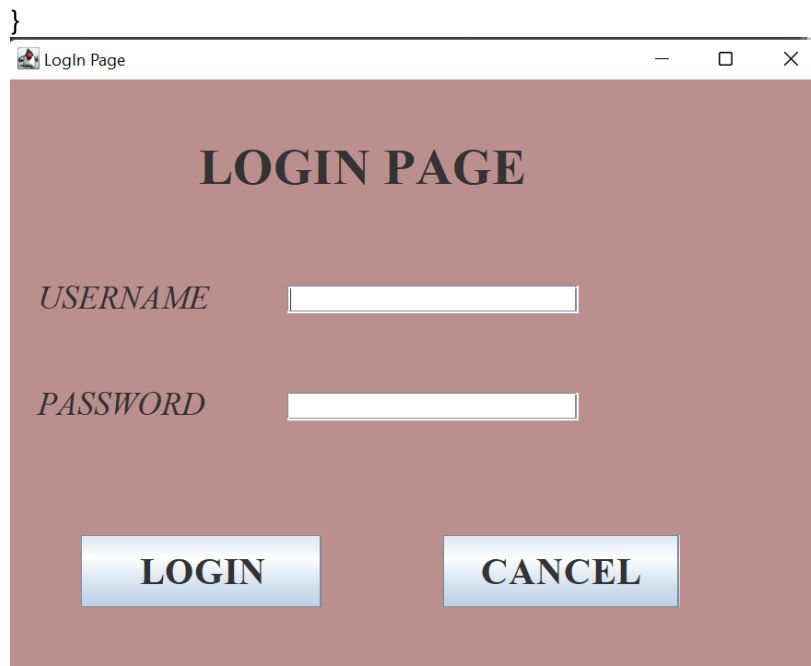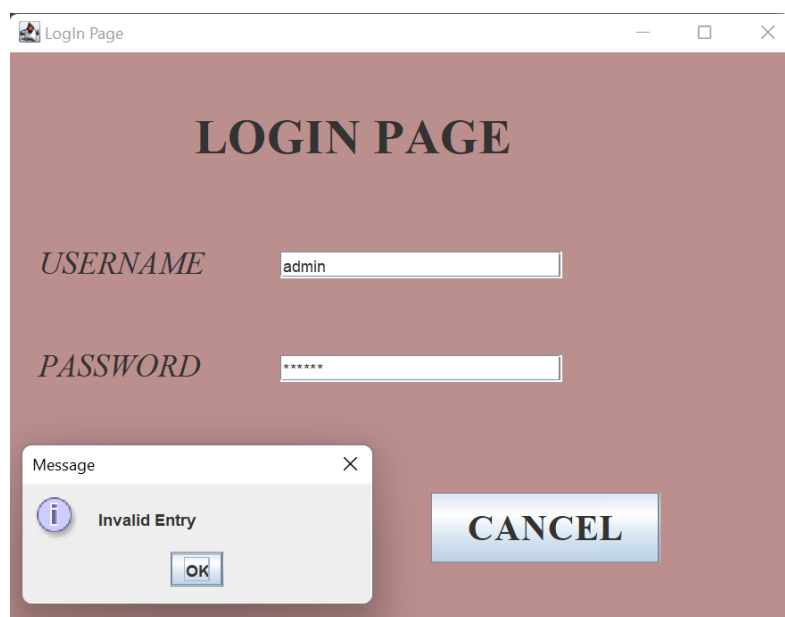
}

On entering wrong details:

3) Menu Page

Code:

```
package login1;
import java.awt.BorderLayout;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JLabel;
import java.awt.Font;

import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.awt.Color;
public class f1 extends JFrame {
        private JPanel contentPane;
        public static void main(String[] args) {
```

```java
				EventQueue.invokeLater(new
Runnable() {
					public void run() {
						try {
							f1
frame = new f1();

		frame.setVisible(true);
						} catch
(Exception e) {

		e.printStackTrace();
						}
					}
				});
			}
			public f1() {

		setDefaultCloseOperation(JFrame.EXI
T_ON_CLOSE);
				setBounds(100, 100, 633,
493);
				setTitle("Menu Page");
				contentPane = new JPanel();

		contentPane.setBackground(new
Color(188, 143, 143));
				contentPane.setBorder(new
EmptyBorder(5, 5, 5, 5));

		setContentPane(contentPane);
				contentPane.setLayout(null);
				JLabel lblNewLabel = new
JLabel("Please choose an operation:");
				lblNewLabel.setFont(new
Font("Times New Roman", Font.ITALIC, 26));
				lblNewLabel.setBounds(10,
81, 411, 36);

		contentPane.add(lblNewLabel);
				JButton btnNewButton = new
JButton("BUY ITEMS");

		btnNewButton.addActionListener(ne
w ActionListener() {
					public void
actionPerformed(ActionEvent e) {
							f3 r = new
f3();

		r.show();
					}

				});
				btnNewButton.setFont(new
Font("Times New Roman", Font.BOLD, 25));
				btnNewButton.setBounds(61,
172, 197, 64);

		contentPane.add(btnNewButton);
				JButton btnAboutUs = new
JButton("ABOUT US");

		btnAboutUs.addActionListener(new
ActionListener() {
					public void
actionPerformed(ActionEvent e) {
							au a = new
au();

		a.show();

					}
				});
				btnAboutUs.setFont(new
Font("Times New Roman", Font.BOLD, 25));
				btnAboutUs.setBounds(61,
308, 197, 64);

		contentPane.add(btnAboutUs);
				JButton btnNewButton_1_1 =
new JButton("STORE-ROOM");

		btnNewButton_1_1.addActionListene
r(new ActionListener() {

	@SuppressWarnings("deprecation")
					public void
actionPerformed(ActionEvent e) {
							f2 i = new
f2();

		i.show();

					}
				});

		btnNewButton_1_1.setFont(new
Font("Times New Roman", Font.BOLD, 22));

		btnNewButton_1_1.setBounds(367,
172, 191, 64);

		contentPane.add(btnNewButton_1_1)
;
```

```java
            JButton btnNewButton_1_2 =
new JButton("EXIT");

        btnNewButton_1_2.addActionListene
r(new ActionListener() {
                    public void
actionPerformed(ActionEvent e) {
                        dispose();
                }
            });

        btnNewButton_1_2.setFont(new
Font("Times New Roman", Font.BOLD, 25));

        btnNewButton_1_2.setBounds(367,
308, 191, 64);
```

```java
        contentPane.add(btnNewButton_1_2)
;
            JLabel lblDearCostumer = new
JLabel("Dear Customer,");
                lblDearCostumer.setFont(new
Font("Times New Roman", Font.ITALIC, 26));

        lblDearCostumer.setBounds(10, 49,
411, 36);

        contentPane.add(lblDearCostumer);
        }

    }
```
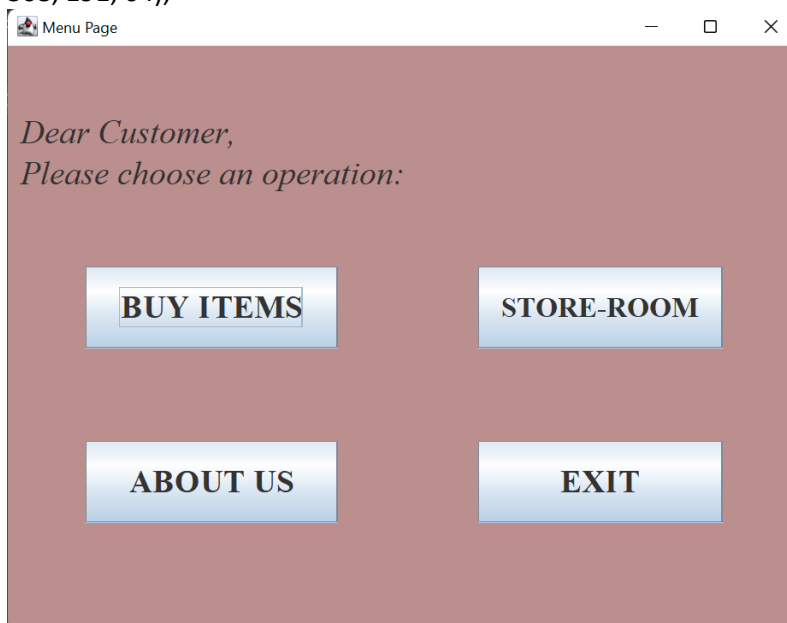

4) On Pressing About Us

Code:

```java
package login1;
import java.awt.BorderLayout;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JLabel;
import java.awt.Font;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.awt.Color;
public class au extends JFrame {
```

```java
    private JPanel contentPane;
    public static void main(String[] args) {
            EventQueue.invokeLater(new
Runnable() {
                public void run() {
                    try {
                            au
frame = new au();

        frame.setVisible(true);
                        } catch
(Exception e) {
```

```java
                    e.printStackTrace();
                                    }
                            }
                });
        }
        public au() {

        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
                setBounds(100, 100, 784, 487);

                setTitle("About Us Page");
                contentPane = new JPanel();

        contentPane.setBackground(new Color(188, 143, 143));
                contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

        setContentPane(contentPane);
                contentPane.setLayout(null);
                JLabel lblNewLabel = new JLabel("About Us - ");
                lblNewLabel.setBounds(5, 5, 760, 38);
                lblNewLabel.setFont(new Font("Times New Roman", Font.BOLD | Font.ITALIC, 32));

        contentPane.add(lblNewLabel);
                JButton btnNewButton = new JButton("EXIT");
                btnNewButton.setBounds(5, 408, 760, 37);

        btnNewButton.addActionListener(new ActionListener() {
                        public void actionPerformed(ActionEvent e) {
                                dispose();
                        }
                });
                btnNewButton.setFont(new Font("Times New Roman", Font.BOLD | Font.ITALIC, 24));

        contentPane.add(btnNewButton);
                JLabel lblNewLabel_1 = new JLabel("Greetings,");

                lblNewLabel_1.setFont(new Font("Times New Roman", Font.BOLD | Font.ITALIC, 26));
                lblNewLabel_1.setBounds(66, 74, 547, 38);

        contentPane.add(lblNewLabel_1);
                JLabel lblNewLabel_1_1 = new JLabel("This mini-project is submitted by Mansi Mishra and Manohar alias Shantaksh Kamat ");

        lblNewLabel_1_1.setFont(new Font("Times New Roman", Font.BOLD | Font.ITALIC, 19));

        lblNewLabel_1_1.setBounds(66, 153, 699, 52);

        contentPane.add(lblNewLabel_1_1);
                JLabel lblNewLabel_1_2 = new JLabel("Our topic is \"FOOD ORDERING SYSTEM\" ");

        lblNewLabel_1_2.setFont(new Font("Times New Roman", Font.BOLD | Font.ITALIC, 26));

        lblNewLabel_1_2.setBounds(112, 123, 547, 38);

        contentPane.add(lblNewLabel_1_2);
                JLabel lblNewLabel_1_1_1 = new JLabel("(Second year, Information Technology, division:A)");

        lblNewLabel_1_1_1.setFont(new Font("Times New Roman", Font.BOLD | Font.ITALIC, 19));

        lblNewLabel_1_1_1.setBounds(348, 177, 699, 52);
```
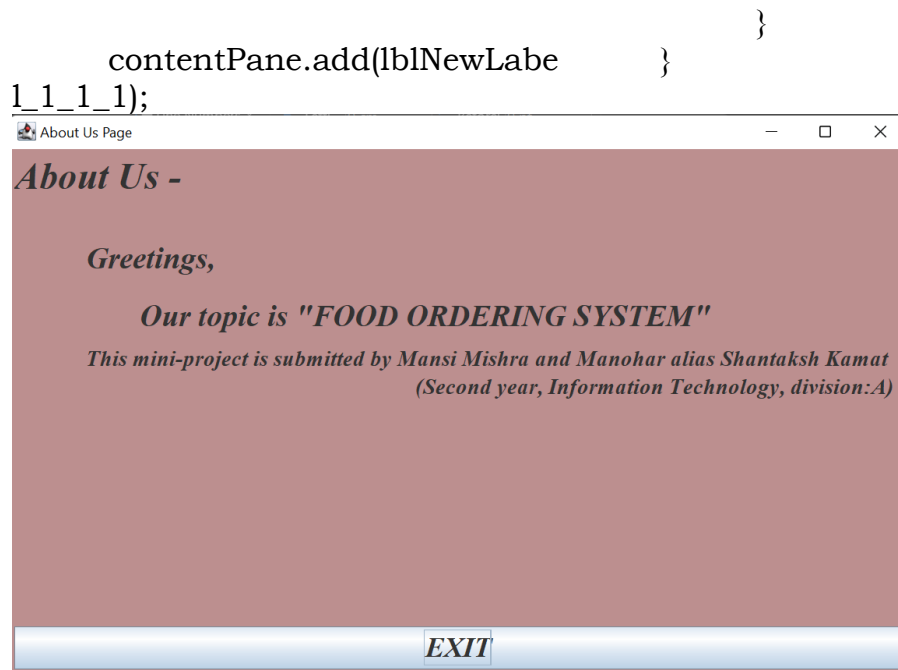
```
                                    }
        contentPane.add(lblNewLabe            }
1_1_1_1);
```


About Us Page   —   □   ×

About Us -

Greetings,

Our topic is "FOOD ORDERING SYSTEM"

This mini-project is submitted by Mansi Mishra and Manohar alias Shantaksh Kamat
(Second year, Information Technology, division:A)

EXIT

5)On pressing- Store Room

Code:

```
package login1;
import java.awt.BorderLayout;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.table.DefaultTableModel;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import java.awt.Font;
import javax.swing.AbstractButton;
import javax.swing.JButton;
import javax.swing.JTable;
import javax.swing.JScrollPane;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.sql.*;
import javax.swing.JTextField;
import java.awt.Color;
public class f2 extends JFrame {
        private JPanel contentPane;
        private JTable table;
        private JTable tblModel;
        private JTextField textField;
        private JTextField textField_1;
        private JTextField textField_2;
        public static void main(String[] args) {

                EventQueue.invokeLater(new
Runnable() {
                        public void run() {
                                try {
                                        f2
frame = new f2();

                                frame.setVisible(true);

                                frame.setTitle("Stores");
                                } catch
(Exception e) {

                                e.printStackTrace();
                                }
                        }
                });
        }
        public f2() {

                setDefaultCloseOperation(JFrame.EXI
T_ON_CLOSE);
                        setTitle("Store-Room");
                        setBounds(100, 100, 734,
502);
                        contentPane = new JPanel();
```

```java
        contentPane.setBackground(new
Color(188, 143, 143));
                contentPane.setBorder(new
EmptyBorder(5, 5, 5, 5));

        setContentPane(contentPane);
                contentPane.setLayout(null);
                JLabel lblNewLabel = new
JLabel("Items Available");
                lblNewLabel.setFont(new
Font("Times New Roman", Font.BOLD, 40));
                lblNewLabel.setBounds(17,
31, 515, 55);

        contentPane.add(lblNewLabel);

                JLabel lblNewLabel_1 = new
JLabel("Item ID:");
                lblNewLabel_1.setFont(new
Font("Times New Roman", Font.ITALIC, 18));
                lblNewLabel_1.setBounds(38,
144, 127, 21);

        contentPane.add(lblNewLabel_1);
                JLabel lblNewLabel_1_1 =
new JLabel("Item Name:");

        lblNewLabel_1_1.setFont(new
Font("Times New Roman", Font.ITALIC, 18));

        lblNewLabel_1_1.setBounds(38, 201,
127, 21);

        contentPane.add(lblNewLabel_1_1);
                JLabel lblNewLabel_1_2 =
new JLabel("Price:");

        lblNewLabel_1_2.setFont(new
Font("Times New Roman", Font.ITALIC, 18));

        lblNewLabel_1_2.setBounds(38, 255,
127, 21);

        contentPane.add(lblNewLabel_1_2);
                final JButton btnNewButton =
new JButton("add");

        btnNewButton.addActionListener(ne
w ActionListener() {

                        public void
actionPerformed(ActionEvent e) {
                                String id =
textField.getText();
                                String name =
textField_1.getText();
                                String price =
textField_2.getText();
                                try {

        Connection con =
DriverManager.getConnection("jdbc:mysql://l
ocalhost:3308/mansi","root","mansi");

        PreparedStatement ps =
con.prepareStatement("insert into
items(ItemID,ItemName,Price)values(?,?,?)");

        ps.setString(1, id);

        ps.setString(2, name);

        ps.setString(3, price);

        ps.executeUpdate();

        JOptionPane.showMessageDialog(btn
NewButton, "Inserted Successfully");
                                } catch
(Exception e1) {
                                        //
TODO Auto-generated catch block

        e1.printStackTrace();
                                }
                        }
                });
                btnNewButton.setFont(new
Font("Times New Roman", Font.BOLD, 17));
                btnNewButton.setBounds(17,
298, 103, 35);

        contentPane.add(btnNewButton);
                final JButton btnDelete = new
JButton("delete");

        btnDelete.addActionListener(new
ActionListener() {
                        public void
actionPerformed(ActionEvent e) {
```

```java
                                String id = textField.getText();
                                String name = textField_1.getText();
                                String price = textField_2.getText();
                                try {
                                        Class.forName("com.mysql.jdbc.Driver");

                                        Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3308/mansi","root","mansi");
                                        PreparedStatement ps = con.prepareStatement("delete from items where ItemID=?");

                                        ps.setString(1, id);

                                        ps.executeUpdate();

                                        JOptionPane.showMessageDialog(btnDelete, "Deleted Successfully");
                                } catch (Exception e1) {
                                        // TODO Auto-generated catch block

                                        e1.printStackTrace();
                                }
                        }
                });
                btnDelete.setFont(new Font("Times New Roman", Font.BOLD, 17));
                btnDelete.setBounds(17, 351, 103, 35);

                contentPane.add(btnDelete);
                final JButton btnEdit = new JButton("edit");

                btnEdit.addActionListener(new ActionListener() {
                        public void actionPerformed(ActionEvent e) {
                                String id = textField.getText();
                                String name = textField_1.getText();
                                String price = textField_2.getText();
                                try {
                                        Class.forName("com.mysql.jdbc.Driver");

                                        Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3308/mansi","root","mansi");

                                        PreparedStatement ps = con.prepareStatement("UPDATE items set ItemName=?,Price=? where ItemID=?");
                                                ps.setString(3, id);
                                                ps.setString(1, name);
                                                ps.setString(2, price);

                                        ps.executeUpdate();

                                        JOptionPane.showMessageDialog(btnEdit, "Updated Successfully");
                                } catch (Exception e1) {
                                        // TODO Auto-generated catch block

                                        e1.printStackTrace();
                                }
                        }
                });
                btnEdit.setFont(new Font("Times New Roman", Font.BOLD, 17));
                btnEdit.setBounds(17, 401, 103, 35);
                contentPane.add(btnEdit);
                table = new JTable();

                table.setShowVerticalLines(false);

                table.setFillsViewportHeight(true);
                table.setBounds(397, 416, 277, -271);
                contentPane.add(table);
                JButton btnDisplay = new JButton("display");

                btnDisplay.addActionListener(new ActionListener() {
                        public void actionPerformed(ActionEvent e) {
                                try {
```

```java
            Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3308/mansi","root","mansi");

            Statement st = con.createStatement();
            String query = "select * from items";

            ResultSet rs = st.executeQuery(query);

            ResultSetMetaData rsmd = rs.getMetaData();

            DefaultTableModel model = (DefaultTableModel) tblModel.getModel();
            int cols= rsmd.getColumnCount();

            String[] colName= new String[cols];

            for(int i = 0;i<cols;i++) {

            colName[i]= rsmd.getColumnName(i+1);

            model.setColumnIdentifiers(colName);
            }
            String id,name,price;

            while(rs.next()) {

            id = rs.getString(1);

            name = rs.getString(2);

            price = rs.getString(3);

            String[] row = {id,name,price};

            model.addRow(row);
            }

            st.close();

            con.close();
            } catch (SQLException e1) {
```

```java
                            // TODO Auto-generated catch block

            e1.printStackTrace();
                        }
                    }
                });
                btnDisplay.setFont(new Font("Times New Roman", Font.BOLD, 17));
                btnDisplay.setBounds(195, 323, 89, 35);

                contentPane.add(btnDisplay);
                JButton btnClear = new JButton("clear");

            btnClear.addActionListener(new ActionListener() {
                        public void actionPerformed(ActionEvent e) {

            tblModel.setModel(new DefaultTableModel());
                        }
                });
                btnClear.setFont(new Font("Times New Roman", Font.BOLD, 17));
                btnClear.setBounds(195, 369, 96, 35);

                contentPane.add(btnClear);
                JScrollPane scrollPane = new JScrollPane();
                scrollPane.setBounds(340, 122, 370, 323);
                contentPane.add(scrollPane);

                tblModel = new JTable();

            scrollPane.setViewportView(tblModel);
                textField = new JTextField();
                textField.setBounds(164, 146, 127, 20);

                contentPane.add(textField);
                textField.setColumns(10);
                textField_1 = new JTextField();
                textField_1.setColumns(10);
                textField_1.setBounds(164, 203, 127, 20);

            contentPane.add(textField_1);
                textField_2 = new JTextField();
```
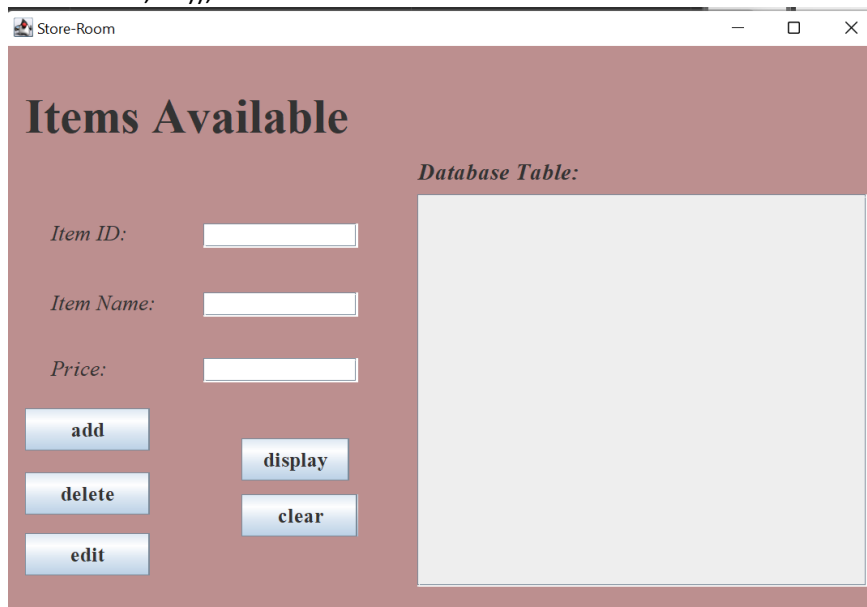
```
                textField_2.setColumns(10);                          lblNewLabel_2.setBounds(340, 97,
                textField_2.setBounds(164,               213, 14);
257, 127, 20);

        contentPane.add(textField_2);                    contentPane.add(lblNewLabel_2);
                JLabel lblNewLabel_2 = new               }
JLabel("Database Table:");               }
                lblNewLabel_2.setFont(new
Font("Times New Roman", Font.BOLD |
Font.ITALIC, 19));
```


Press Display to display the table from database stored in MySql Workbench

Database in MySql Workbench
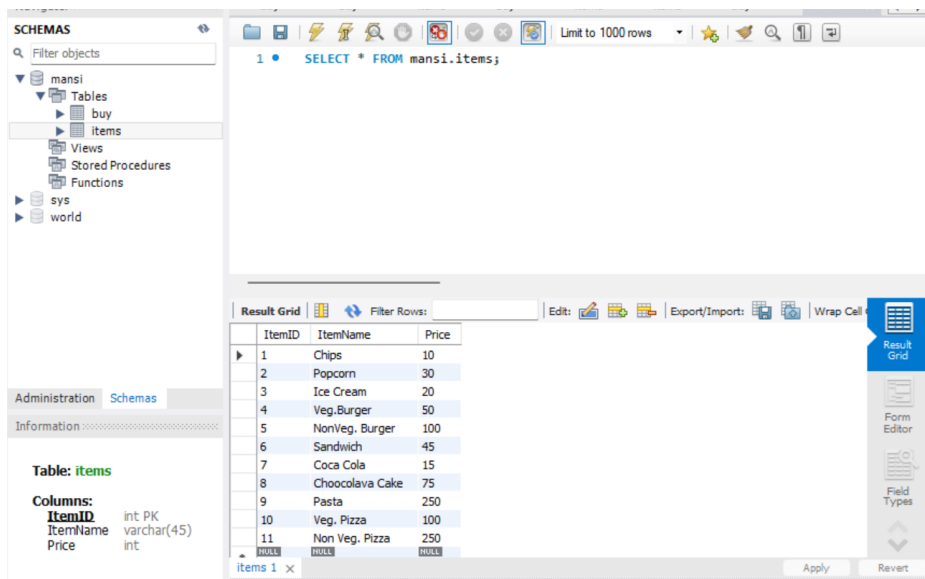
Inserting an entry
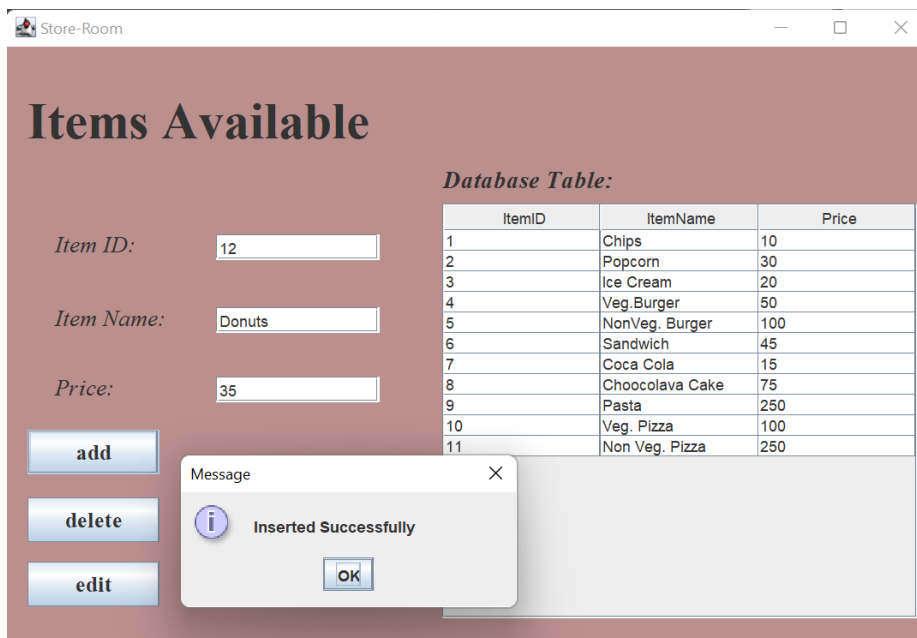
Checking the table in the JFrame

Data also updated in the database

Deleting an entry

Checking the table:

Database updated in MySql too

Updating an entry

6) Billing System(on clicking BUY ITEMS button)

Code:

```
package login1;
import java.awt.BorderLayout;
import java.sql.*;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.table.DefaultTableModel;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import java.awt.Font;
import javax.swing.JTextField;
import javax.swing.JTable;
import javax.swing.JButton;
import javax.swing.JComboBox;
import javax.swing.JSpinner;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import javax.swing.JScrollPane;
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;

import javax.swing.JCheckBox;
import javax.swing.SwingConstants;
import javax.swing.JTextArea;
import java.awt.event.ItemListener;
import java.awt.event.ItemEvent;
import javax.swing.event.ChangeListener;
import javax.swing.event.ChangeEvent;
import java.awt.Color;
public class f3 extends JFrame {
        private JFrame frame;
        private JTextField ti;
        private JTextField tn;
        private JTextField sp;
        private JTextField ta;
        private JTextField tt;
        public static void main(String[] args) {
```

```java
                EventQueue.invokeLater(new Runnable() {
                        public void run() {
                                try {
                                        f3 frame = new f3();
                                        frame.setVisible(true);

                                        frame.setResizable(false);

                                        frame.setTitle("Bill");
                                } catch (Exception e) {

                                        e.printStackTrace();
                                }
                        }
                });
        }
        Connection con;
        ResultSet rs;
        PreparedStatement pst;
        private JTable table;
        public f3() {

                getContentPane().setFont(new Font("Times New Roman", Font.BOLD, 17));

                getContentPane().setBackground(new Color(188, 143, 143));

                getContentPane().setLayout(null);
                JLabel lblNewLabel = new JLabel("Item ID");
                lblNewLabel.setFont(new Font("Times New Roman", Font.ITALIC, 20));
                lblNewLabel.setBounds(27, 69, 81, 25);

                getContentPane().add(lblNewLabel);
                JLabel lblItemName = new JLabel("Item Name");
                lblItemName.setFont(new Font("Times New Roman", Font.ITALIC, 20));
                lblItemName.setBounds(167, 69, 103, 25);

                getContentPane().add(lblItemName);
                JLabel lblQty = new JLabel("Qty");

                lblQty.setFont(new Font("Times New Roman", Font.ITALIC, 20));
                lblQty.setBounds(313, 69, 49, 25);
                getContentPane().add(lblQty);
                final JSpinner sq = new JSpinner();
                sq.addChangeListener(new ChangeListener() {
                        public void stateChanged(ChangeEvent e) {
                                int qty = Integer.parseInt(sq.getValue().toString());
                                int price = Integer.parseInt(sp.getText());
                                int tot = qty*price;

                                ta.setText(String.valueOf(tot));
                        }
                });
                sq.setBounds(293, 105, 73, 20);
                getContentPane().add(sq);
                JLabel lblPrice = new JLabel("Price");
                lblPrice.setFont(new Font("Times New Roman", Font.ITALIC, 20));
                lblPrice.setBounds(393, 69, 81, 25);

                getContentPane().add(lblPrice);
                final JLabel lblAmount = new JLabel("Amount");
                lblAmount.setFont(new Font("Times New Roman", Font.ITALIC, 20));
                lblAmount.setBounds(507, 69, 81, 25);

                getContentPane().add(lblAmount);
                ti = new JTextField();
                ti.addKeyListener(new KeyAdapter() {
                        @Override
                        public void keyPressed(KeyEvent e) {

                                if(e.getKeyCode()== KeyEvent.VK_ENTER) {
                                        String id = ti.getText();
```

```java
                try {

    Connection con =
DriverManager.getConnection("jdbc:mysql://l
ocalhost:3308/mansi","root","mansi");

    PreparedStatement pst =
con.prepareStatement("select * from items
where ItemID=?");

    pst.setString(1, id);

    rs = pst.executeQuery();

    if(rs.next() == false) {
    JOptionPane.showMessageDialog(lblA
mount, "Item ID not found");

    }

    else {

        String iname =
rs.getString("ItemName");

        String price =
rs.getString("Price");


        tn.setText(iname.trim());

        sp.setText(price.trim());

    }
                }
                catch
(Exception e1) {

        // TODO Auto-generated
catch block

        e1.printStackTrace();

    }
                }
}));
    ti.setBounds(30, 105, 96, 20);
    getContentPane().add(ti);
    ti.setColumns(10);
    tn = new JTextField();

    tn.setColumns(10);
    tn.setBounds(167, 105, 96,
20);
    getContentPane().add(tn);
    sp = new JTextField();
    sp.setColumns(10);
    sp.setBounds(393, 105, 96,
20);
    getContentPane().add(sp);
    ta = new JTextField();
    ta.setColumns(10);
    ta.setBounds(507, 105, 96,
20);
    getContentPane().add(ta);
    tt = new JTextField();
    tt.setColumns(10);
    tt.setBounds(598, 393, 143,
20);
    getContentPane().add(tt);
    JLabel lblNewLabel_1 = new
JLabel("Customer Bill Generation");

    lblNewLabel_1.setHorizontalAlignmen
t(SwingConstants.CENTER);
        lblNewLabel_1.setFont(new
Font("Times New Roman", Font.BOLD, 25));

    lblNewLabel_1.setBounds(293, 21,
303, 25);

    getContentPane().add(lblNewLabel_1)
;
        final JButton btnNewButton =
new JButton("ADD");

    btnNewButton.addActionListener(ne
w ActionListener() {
            public void
actionPerformed(ActionEvent e) {
                String id =
ti.getText();
                String name =
tn.getText();
                String q =
sq.getValue().toString();
                String pr =
sp.getText();
                String a =
ta.getText();
                try {
```

```java
            Connection con =
DriverManager.getConnection("jdbc:mysql://l
ocalhost:3308/mansi","root","mansi");

            PreparedStatement ps =
con.prepareStatement("insert into
buy(ID,ItemName,Qty,Price,Amount)values(?,
?,?,?,?)");

            ps.setString(1, id);

            ps.setString(2, name);

            ps.setString(3, q);

            ps.setString(4, pr);

            ps.setString(5, a);

            ps.executeUpdate();

            JOptionPane.showMessageDialog(btn
NewButton, "Inserted Successfully");
                            } catch
(Exception e1) {
                                    //
TODO Auto-generated catch block

            e1.printStackTrace();
                            }
                    }});
                    btnNewButton.setFont(new
Font("Times New Roman", Font.BOLD, 21));

            btnNewButton.setBounds(598, 148,
143, 56);

            getContentPane().add(btnNewButton)
;
                    JScrollPane scrollPane = new
JScrollPane();
                    scrollPane.setBounds(27, 169,
561, 244);

            getContentPane().add(scrollPane);
                    table = new JTable();

            scrollPane.setViewportView(table);


            JButton btnNewButton_1 =
new JButton("DISPLAY");

            btnNewButton_1.setFont(new
Font("Times New Roman", Font.BOLD, 17));

            btnNewButton_1.addActionListener(n
ew ActionListener() {
                            public void
actionPerformed(ActionEvent e) {
                                    try {

            Connection con =
DriverManager.getConnection("jdbc:mysql://l
ocalhost:3308/mansi","root","mansi");

            Statement st = con.createStatement();
                                    String
query = "select * from buy";

            ResultSet rs =
st.executeQuery(query);

            ResultSetMetaData rsmd =
rs.getMetaData();

            DefaultTableModel model =
(DefaultTableModel) table.getModel();
                                            int
cols= rsmd.getColumnCount();

            String[] colName= new String[cols];

            for(int i = 0;i<cols;i++) {

            colName[i]=
rsmd.getColumnName(i+1);

            model.setColumnIdentifiers(colName)
;
                                            }
                                    String
id,name,q,p,a;

            while(rs.next()) {

            id = rs.getString(1);

            name = rs.getString(2);

            q = rs.getString(3);
```

```java
            p = rs.getString(4);

            a = rs.getString(5);

            String[] row = {id,name,q,p,a};

            model.addRow(row);
                                    }

            st.close();

            con.close();
                                } catch
(SQLException e1) {
                                    //
TODO Auto-generated catch block

            e1.printStackTrace();
                                }
                    }
                });

        btnNewButton_1.setBounds(598, 241,
143, 25);

        getContentPane().add(btnNewButton
_1);
                JButton btnNewButton_1_1 =
new JButton("CLEAR");

        btnNewButton_1_1.setFont(new
Font("Times New Roman", Font.BOLD, 17));

        btnNewButton_1_1.addActionListene
r(new ActionListener() {
                        public void
actionPerformed(ActionEvent e) {

        table.setModel(new
DefaultTableModel());
                        }
                });

        btnNewButton_1_1.setBounds(598,
277, 143, 25);

        getContentPane().add(btnNewButton
_1_1);
```
Type the item code

```java
            JButton
btnNewButton_1_1_1 = new
JButton("TOTAL");

        btnNewButton_1_1_1.setFont(new
Font("Times New Roman", Font.BOLD, 17));

        btnNewButton_1_1_1.addActionListe
ner(new ActionListener() {
                        public void
actionPerformed(ActionEvent e) {
                            int sum =0;
                            for(int
i=0;i<table.getRowCount();i++) {
                                sum =
sum + Integer.parseInt(table.getValueAt(i,
4).toString());
                            }

            tt.setText(Integer.toString(sum));
                        }
                });

    btnNewButton_1_1_1.setBou
nds(598, 327, 143, 46);

    getContentPane().add(btnNe
wButton_1_1_1);
            JLabel lblBillalsoSaved
= new JLabel("Bill (also saved in
the database):");

    lblBillalsoSaved.setFont(new
Font("Times New Roman",
Font.BOLD | Font.ITALIC, 18));

    lblBillalsoSaved.setBounds(2
7, 136, 284, 30);

    getContentPane().add(lblBilla
lsoSaved);
        }
}
```

Press Enter

Adjust the quantity & automatically amount gets displayed

After adding a few more items press display to see the bill

On pressing total button the total amount to pay gets displayed

Bill stored in database in another table called "buy"

ID	ItemName	Qty	Price	Amount
6	Sandwich	2	45	90
8	Choocolava Cake	4	75	300
NULL	NULL	NULL	NULL	NULL

Conclusion: The mini-project was completed successfully.