



**slington college**  
(इस्लिंग्टन कलेज)

**Module Code & Module Title**

**CS5004NA Emerging Programming Platforms and Technologies**

**Assessment Weightage & Type**

**30% Group Coursework**

**Title (Where Required):**

**Year and Semester**

**2020-21 Autumn**

Group Name: Jelled Mart Information System			
SN	Student Name	College ID	University ID
1	Azan Ahmed Siddique	NP01CP4A190120	19030779
2	Roshan Adhikari	NP01CP4A190060	19031538
3	Siddhartha Ghimire	NP01CP4A190148	19031691
4	Anup Shrestha	NP01CP4A190139	19030728
5	Anup Gajurel	NP01CP4A190141	19030725
6	Aashish Ojha	NP01CP4A180317	

*I confirm that I understand my coursework needs to be submitted online via Google Classroom under the relevant module page before the deadline in order for my assignment to be accepted and marked. I am fully aware that late submissions will be treated as non-submission and a marks of zero will be awarded.*

# Table of Contents

1. Proposal.....	1
2. Individual task .....	4
3. Introduction .....	5
4.1. Working mechanism of binary Search. ....	7
4.2. Implementation of Binary Search in program.....	8
5. Sorting Algorithm Name .....	10
5.1. Working Mechanism of the Selection Sort .....	10
5.2. Implementation of (selected sorting technique) in program.....	12
6. Method Description .....	14
6.1. main( ) : void.....	14
6.2. Login( ) .....	14
6.3. AddItem().....	14
6.4. EditItem() .....	15
6.5. ItemInfo() .....	15
6.6. actionPerformed(e :(ActionEvent) : void .....	15
6.7. formWindowOpened(): void .....	15
6.8. RegisterEmployee(): .....	16
6.9. EmployeeInfo(): .....	16
6.10. Employee() .....	16
6.11. MyProfile() .....	16
6.12. ChangePassword() .....	17
6.13. BillItem() .....	17
6.14. selectionSort(int col): void.....	17
7. Testing .....	18
7.1 Testing 1 .....	18
7.2 Testing 2.....	19
7.3 Testing 3.....	20
7.4 Testing 4.....	22
7.5 Testing 5.....	24
7.6 Testing 6.....	26

7.8 Testing 8.....	30
7.9 Testing 9.....	31
7.10 Testing 10.....	32
8. Conclusion .....	36
9. References.....	37
10. Appendix A .....	38
A) AddItem.java .....	38
B) Admin.java .....	87
C) BillItem.java.....	100
D) BillingItemRecord.java .....	117
E) ChangePasswordEmployee.java .....	119
F) EditItem.java .....	128
G) Employee.java.....	149
H) EmployeeInfo.java.....	157
I) EmployeeRecord.java .....	170
J) ItemInfo.java.....	172
K) ItemRecord.java .....	186
L) Login.java.....	189
M) MyProfile.java.....	201
N) RegisterEmployee.java .....	210
O) StartBilling.java .....	233
P) UpdateItem.java .....	246

## List of Tables

Table 1: Testing 1 .....	18
Table 2: Testing 2 .....	19
Table 3: Testing 3 .....	20
Table 4: Testing 4 .....	22
Table 5: Testing 5 .....	24
Table 6: Testing 6 .....	26
Table 7: Testing 7 .....	28

Table 8: Testing 8 .....	30
Table 9: Testing 9 .....	31
Table 10: Testing 10.....	32
Table 11: Testing 10.1.....	34
Table 12: Testing 10.3.....	35

## Table of Figures

Figure 1: Example of binary search.....	7
Figure 2: Before Searching .....	8
Figure 3: After Searching .....	9
Figure 4: Before sorting.....	12
Figure 5: After Sorting .....	13
Figure 6: 7.1 Testing 1 .....	18
Figure 7: Testing 2 (Admin Login) .....	19
Figure 8: Testing 2 (After Login).....	19
Figure 9: Testing 3 (Admin GUI) .....	20
Figure 10: Testing 3 (After Add Item button is clicked).....	21
Figure 11: Testing 4 (Opening file menu) .....	22
Figure 12: Testing 4 (Importing more data in table) .....	23
Figure 13: Testing 5 (Adding item manually) .....	24
Figure 14: Testing 5 (After item is added) .....	25
Figure 15: Testing 6 (Before Sorting) .....	26
Figure 16: Testing 6 (After Sorting) .....	27
Figure 17: Testing 7 (Searching item by Price) .....	29
Figure 18: Testing 7 (Searching by Price).....	29
Figure 19: Testing 8 (Search item name by category).....	30
Figure 20: 7.9 Testing 9 .....	31
Figure 21: 7.10 Testing 10 .....	33
Figure 22: 7.10 Testing 10.2 .....	34
Figure 23: 7.10 Testing 12 .....	35

## 1. Proposal

### Jelled Mart Information System

#### Introduction

Jelled Mart Information System is the billing software for selling different products. It is developed for mart business organization to make easy to sell the product to the customer in digital way. Jelled mart information system is designed to handle time and billing tracking as well as invoicing customers for services and products. Jelled mart stocks home utility products – including food, toiletries, beauty products, garments, kitchenware, bed and bath linen, home appliances and more - available at competitive prices that our customers appreciate. Our code objective is to offer customers good products at great value.

#### List of data.

Jelled mart information system has the following list of data:

**Id:** Product ID will be obtained from JTextField. Each product id of jelled mart will be unique and auto increment. The obtained value from JTextField will be an integer.

**Name:** Name will be obtained from JTextField. The name of the product will be registered in the jelled mart information system if a new product is added to stock. The obtained value from JTextField will be a String.

**Categories:** Categories will be obtained from JComboBox. Each product will have different categories as classified. The obtained value from JComboBox will be a String.

**Price:** The price will be differed according to its product. The price will be obtained from JTextField. It's data type will be an integer.

**Price range:** The price range will be according to the product choice. Price range will be obtained from JSlider. Its data type will be an integer.

**Recommendation:** Jelled mart has imported different new products and provide to customer with great value. Recommendations will be obtained from JRadioButton. The obtained value from JRadioButton. It's data type will be an integer.

## **List of features.**

1. Login System:

Registered admin and employee can only log in our system with proper validation.

2. Register Employee:

Employee will be added and can view details by only admin.

3. Change Password:

Employee can change his/her own password.

4. Employee Info:

Employee information can be seen by the admin.

5. Add Item:

Item will be added with its all features and specification as added to the stock by admin.

6. Edit Item:

Item can be updated as its requirement by admin.

7. Item Info

Item Information can be seen by the admin.

8. Item search:

Employees can search item as the customers buys that particular item.

9. Item sort

Admin can sort items by their price.

10. Billing Product:

Billing Product can be only billed by the employees.

## **Tools Used:**

### **a.) Programming:**

Jelled Mart Information System has been create using JAVA programming language. Java is a powerful general-purpose programming language. It is used to develop desktop and mobile applications, big data processing, embedded systems, and so on. (Programiz, 2020)

### **b.) Balsamiq:**

Balsamiq is a graphical user interface website wireframe builder application. It allows the designer to arrange pre-built widgets using a drag-and-drop WYSIWYG editor. The application is offered in a desktop version as well as a plug-in for Google Drive, confluence and JIRA. (Wikipedia, 2020)

Jelled Mart GUI layout is made using Balsamiq.

**c.) NetBeans:**

NetBeans is an integrated development environment for Java. NetBeans IDE lets you quickly and easily develop **Java** desktop, mobile, and web applications, as well as HTML5 applications with HTML, **JavaScript**, and CSS. The IDE also provides a great set of tools for **PHP** and C/C++ developers. (NetBeans , 2020)

Jelled Mart Information System is made by using NetBeans Software.

**2. Individual task**

<b><u>Group member</u></b>	<b><u>Responsibilities (Coding and Report)</u></b>
1. Anup Shrestha	Coding, validation, documentation (1, 4.2, 7.4, 7.5, 10), GUI, report design structure.
2. Azan Ahmed Siddique	Coding, validation, documentation (1, 5.2, 6, 7.6, 7.7), GUI, report design structure.
3. Siddhartha Ghimire	Balsamiq mock-up, documentation (1, 5, 5.1, 6), GUI validation.
4. Roshan Adhikari	Coding (Validation), Documentation (1, 3, 4, 4.1, 8)
5. Anup Gajurel	Testing 7.2, 7.3, appendix
6. Aashish Ojha	Testing 7.1, 7.9, 7.10



### **3. Introduction**

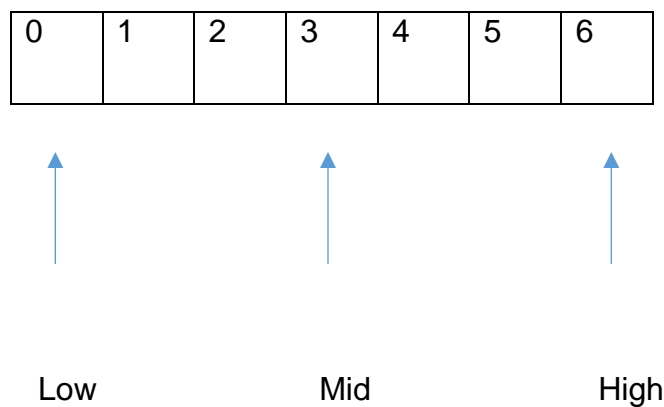
This is the first group coursework carrying the weightage of 30% of the module Emerging Programming Platforms and Technology. This work focuses on a jelled mart information system where the admin can register employees and make changes as per accordance. All the codes are written in Java programming language by creating a new project in the platform NetBeans.

NetBeans could be a Java-based integrated development setting (IDE). The term conjointly refers to the IDE's underlying application platform framework. Tools and capabilities of the NetBeans IDE embrace a feature-rich text editor with refactoring tools and code templates, high level and granular views of applications, a tangle and drop GUI style, and versioning exploitation out-of-the-box integration with tools like a stinker. The underlying NetBeans platform supports the creation of recent applications and extra development of existing applications that apply commonplace package parts. As a degree application running on the NetBeans Platform, the NetBeans IDE itself is protrusive and can be extended to support new languages (Rouse, 2014).

This assignment is about the billing software where the items can be added and updated as per the requirement. Employees can change their password or make changes. But it is possible only when their name is registered by the admin. This program is completely logical and very easy to run as it is the result of a lot of hard work and dedication.

## 4. Binary Search

Binary Search in Java may be a search rule that finds the position of a target worth inside a sorted array. Binary search compares the target worth to the center part of the array. It works solely on a sorted set of parts. To use binary search on a group, the gathering should initial be sorted (Edureka, 2021).



When the binary search is employed to perform operations on a sorted set, the amount of iterations will continuously be reduced on the premise of the worth that's being searched. You'll be able to see within the on top of photo of finding the middle component. The analogy of binary search is to use the data that the array is sorted and cut back the time quality to  $O(\log n)$  (Edureka, 2021).

## 4.1. Working mechanism of binary Search.

1. Start with the center element:
  - If the target value is adequate to the center component of the array, then return the index of the center component.
  - If not, then compare the center component with the target value, If the target value is larger than the value within the middle index, then decide the weather to the proper of the center index, and begin with Step one.
  - If the target value is a smaller than the value within the middle index, then decide the weather to the left of the center index, and begin with Step one.
2. When a match is found, return the index of the component matched.
3. If no match is found, then come repeat again (Studytonight, 2021).

For example:

	0	1	2	3	4	5	6	7	8	9
Search 16	2	5	8	12	14	16	28	38	69	91
	L=0	1	2	3	M=4	5	6	7	8	H=9
16 > 14 take 2nd half	2	5	8	12	14	16	28	38	69	91
	0	1	2	3	4	L=5	6	M=7	8	H=9
16 > 38 take 1st half	2	5	8	12	14	16	28	38	69	91
	0	1	2	3	4	L=5, m=5	H=6	7	8	9
Found 16 Return 5	2	5	8	12	14	16	28	38	69	91

Figure 1: Example of binary search

Here, we have to search 16 from the sorted elements. If 16 is greater than the 14 take it to the second half. Again, if the 16 is smaller than the 38 take it to the first half. When 16 is found return the value of the fifth index of the matched elements.

## 4.2. Implementation of Binary Search in program

Entering a price in the search field.

**Add Item**

Back

Item ID

Item Name

Item Price

Item Category **SELECT CATEGORY** ▼

Price Range ☐ Low ☐ Medium ☐ High

Item Quantity

Add Item Clear

**Item Info**

**SELECT CATEGORY** ▼ Search by Category  Search by Price

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
1	Apple	20	Fruits	Low	100
2	Orange	10	Fruits	Low	100
3	Mango	50	Fruits	Low	100
4	Toblerone	500	Chocolates	High	100
5	Mars	100	Chocolates	Medium	100
6	Almond	250	Dev Fruits	High	100

Sort By Price Delete

Figure 2: Before Searching

Clicking the search button initiates the binary search and display the items details with the given price in the table as well as in a message dialog box.

**Add Item**

Back

Item ID:

Item Name:

Item Price:

Item Category: **SELECT CATEGORY** ▼

Price Range: ☐ Low ☐ Medium ☐ High

Item Quantity:

**Message**

Item-ID : 1  
Item-Name : Apple  
Item-Price : 20  
Item-Category : Fruits  
Price-Range : Low  
Item-Quantity : 100

Clear

**SELECT CATEGORY** ▼

20

**Search by Price**

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
1	Apple	20	Fruits	Low	100

**Sort By Price** **Delete**

Figure 3: After Searching

## 5. Sorting Algorithm Name

The sorting algorithm used in this Coursework (Jelled Mart Information System) is Selection Sort.

Selection sort is a simple algorithm that selects the smallest element from an unsorted list in each iteration and place the element at the beginning of that unsorted list. In the sorting algorithm the list is divided into two parts, the sorted parts at the left end and the unsorted parts at the right end (tutorialspoint, 2021). Initially the sorted parts are empty, and the unsorted parts are the entire list (tutorialspoint, 2021). The smallest element is selected from the unsorted array and is swapped with the left most element, and so element become the parts of the sorted array (tutorialspoint, 2021). The Selection Sort has  $O(n^2)$  time complexity where  $n$  determines the number of items.

### 5.1. Working Mechanism of the Selection Sort

Considering the following unsorted array as an example:

5	2	20	6	22	40	32
---	---	----	---	----	----	----

From the given unsorted array first considering first position as sorted and comparing it with all the remaining values from the array until the value less than the first position appears.

Since 2 is the lowest value than the first position i.e. 5 from the array so swapping the value with each other. And so formed array is given below:

2	5	20	6	22	40	32
---	---	----	---	----	----	----

Now comparing the value from the second position to all the remaining values except the first position from the array. Since 5 is the lowest value among all the remaining values so it does not swap with any values.

2	5	20	6	22	40	32
---	---	----	---	----	----	----

Similarly comparing the value from the third position to all the remaining values except the first and second position from the array. Since 6 is the lowest value then the third position so it swaps with each other. And so formed array is given below:

2	5	6	20	22	40	32
---	---	---	----	----	----	----

Comparing the value from the fourth position to all the remaining values except first, second and third position from the array. Since 20 is the lowest value among all the remaining values so it does not swap with any values.

2	5	6	20	22	40	32
---	---	---	----	----	----	----

Comparing the value from the fifth position to all the remaining values except first, second, third and fourth position from the array. Since 22 is the lowest value among all the remaining values so it does not swap with any values.

2	5	6	20	22	40	32
---	---	---	----	----	----	----

Comparing the value from the sixth position to all the remaining values except first, second, third and fourth position from the array. Since 32 is the lowest value then the sixth position so it swaps with each other. And so formed array is given below:

2	5	6	20	22	32	40
---	---	---	----	----	----	----

The Algorithm from the programming aspects is given below:

**Step 1** – Setting min to location 0.

**Step 2** – Searching the minimum element from the Array list.

**Step 3** – Swapping the value at location min.

**Step 4** – Increasing the value of min to point to next element.

**Step 5** – Repeating the process until the Array List is Sorted.

## 5.2. Implementation of (selected sorting technique) in program

**Add Item**

Back

Item ID:

Item Name:

Item Price:

Item Category:

Price Range: ☐ Low ☐ Medium ☐ High

Item Quantity:

Add Item Clear

**Item Info**

Search by Category  Search by Price

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
1	Apple	20	Fruits	Low	100
2	Orange	10	Fruits	Low	100
3	Mango	50	Fruits	Low	100
4	Toblerone	500	Chocolates	High	100
5	Mars	100	Chocolates	Medium	100
6	Almond	250	Dark Fruits	High	100

Sort By Price Delete

Figure 4: Before sorting



Clicking on the “Sort by price” JButton, which sorts the items by price in ascending order.

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
2	Orange	10	Fruits	Low	100
1	Apple	20	Fruits	Low	100
12	Dahi	25	Dairy Products	Low	100
11	Lassi	30	Dairy Products	Low	100
10	Spinach	40	Vegetables	Low	100
9	Mango	50	Fruits	Low	100

Figure 5: After Sorting

## **6. Method Description**

### **6.1. main( ) : void**

This is the main method of Java, where object of current class i.e. Login, is created. So, that when Java call main method while running the program created object will automatically call the constructor of Login class, where all the necessary components that are required for building up the GUI are implemented.

### **6.2. Login( )**

This is the constructor of Login class, which is created for initializing component frame and label, where frame name is "Login" with the label title "Jelled Mart Information System". There is one JButton component called Login, two JTextField component for username and password and one jTable component which display the username, password and type of person logging in. When Login Button is click Admin( ) constructor method is called where all the component of GUI such as jButtons are implemented to Add Item, Edit Item, Item Info, Register Employee, Employee info, Log out and Back respectively. This method is also called when the "Log Out" jButton inside Admin and Employee panel are clicked.

### **6.3. AddItem()**

This is the constructor of AddItem class, which is created for initializing component frame and label, where frame name is "AddItem" with the label title "Add Item". It is called when the jButton "Add Item" in admin panel is clicked. There are five jTextFields, one buttongroup, two JComboBox, seven jButtons, one jTable with a jMenuBar containing two jMenu called "File" and "Help". "File" menu contains two jMenuItems, which are "Open" and "Exit". Similarly, "Help" menu contains one jMenuItem, which is "User Guide" respectively.

#### **6.4. EditItem()**

This is the constructor of EditItem class, which is created for initializing component frame and label, where frame name is “EditItem” with the label title “Edit Item”. It is called when the JButton “Edit Item” in admin panel is clicked. There are four JTextFields, one buttongroup, one JComboBox, and three JButtons.

#### **6.5. ItemInfo()**

This is the constructor of ItemInfo class, which is created for initializing component frame and label, where frame name is “ItemInfo” with the label title “Item Info”. It is called when the JButton “Item Info” in admin panel is clicked. There is one JTextFields, one jTable, and three JButtons.

#### **6.6. actionPerformed(e :(ActionEvent)) : void**

This is the most important method of this GUI belonging to ActionListener class. This method is compulsory to override as ActionListener has this abstract method. Here, by using getActionCommand and getActionListener method, different actionCommand and actionEvent is accessed. A unique actionCommand is given a specific method to execute. Hence, if button form “Add Item” is pressed, then ItemRecord() constructor method and addTable() method is executed. This property is implemented for all the buttons inside GUI.

#### **6.7. formWindowOpened(): void**

This method has been used to show data in JTextFields and jTable where necessary. For example, this method is called when the “Add Item” button in the admin panel is clicked and it imports all the data into the jTable inside AddItem frame automatically.

### **6.8. RegisterEmployee():**

This is the constructor of RegisterEmployee class, which is created for initializing component frame and label, where frame name is “RegisterEmployee” with label title “Register Employee”. It is called when the jButton “Register Employee” in admin panel is clicked. There are four jTextFields, one buttongroup, one jComboBox and two jButtons.

### **6.9. EmployeeInfo():**

This is the constructor of EmployeeInfo class, which is created for initializing component frame and label, where frame name is “EmployeeInfo” with the label title “Employee Info”. It is called when the jButton “Employee Info” in admin panel is clicked. There is one jTextFields, one jTable, and three jButtons.

### **6.10. Employee()**

This is the constructor of Employee class, which is created for initializing component frame and label, where frame name is “Employee” with the label title “Employee” and a welcome text containing the name of the employee. It is called when a valid username and password of employee is entered in Login panel. When Login Button is click Employee( ) constructor method is called where all the component of GUI such as jButtons such “My Profile”, “Change Password”, “Bill Item” and “Log Out” respectively.

### **6.11. MyProfile()**

This is the constructor of MyProfile class, which is created for initializing component frame and label, where frame name is “MyProfile” with the label title “My Profile”. It is called when the jButton “My Profile” in the employee panel is clicked. There are three un-editable jTextField in which values are set automatically when the user clicks on the “My Profile” button in employee panel. It also contains one jButton.

### **6.12. ChangePassword()**

This is the constructor of ChangePassword class, which is created for initializing component frame and label, where frame name is "ChangePassword" with the label title "Change Password". It is called when the JButton "My Profile" in employee panel is clicked. Inside the frame, there are two JTextField and three JButtons.

### **6.13. BillItem()**

This is the constructor of BillItem class, which is created for initializing component frame and label, where frame name is "BillItem". It is called when the JButton "Bill Item" in the employee panel is clicked. There are six JTextField and three JButtons called "Add to cart", "Next" and "Back". When "Add to cart" JButton is clicked, the registered item is added to an arraylist object bRecord of BillingItemRecord class. When "Next" JButton is clicked, UpdateItem() constructor method is called and the user is taken to the UpdateItem panel where it contains a jTable, four JTextfields and four JButtons called "Confirm", "Delete", "Update" and "Back". When "Confirm" JButton is clicked, the quantity of the items bought is reduced from the arraylist object of ItemRecord class and StartBilling() constructor method is called and the user is redirected to the StartBilling panel. It contains three JTextFields, one JTextArea, two JButtons.

### **6.14. selectionSort(int col): void**

This method is used to sort item price in ascending order. It is called when the "Sort by Price" JButton in AddItem frame is click. The sorting method used is Selection sort. Selection sort is a simple algorithm that selects the smallest element from an unsorted list in each iteration and place the element at the beginning of that unsorted list (tutorialspoint, 2021). In the sorting algorithm the list is divided into two parts, the sorted parts at the left end and the unsorted parts at the right end (tutorialspoint, 2021).

## 7. Testing

### 7.1 Testing 1

Testing that the program can be compiled and run using Apache NetBeans

Objective	Compile and run the java program from Apache NetBeans
Action	Executing the java program through Apache NetBeans by opening software, going to the location of the program and compiling and running the java package.
Expected Result	JelledMartInformationSystem should compile and run without any errors
Actual Result	The program was compiled and run successfully.
Conclusion	Test Successful

Table 1: Testing 1

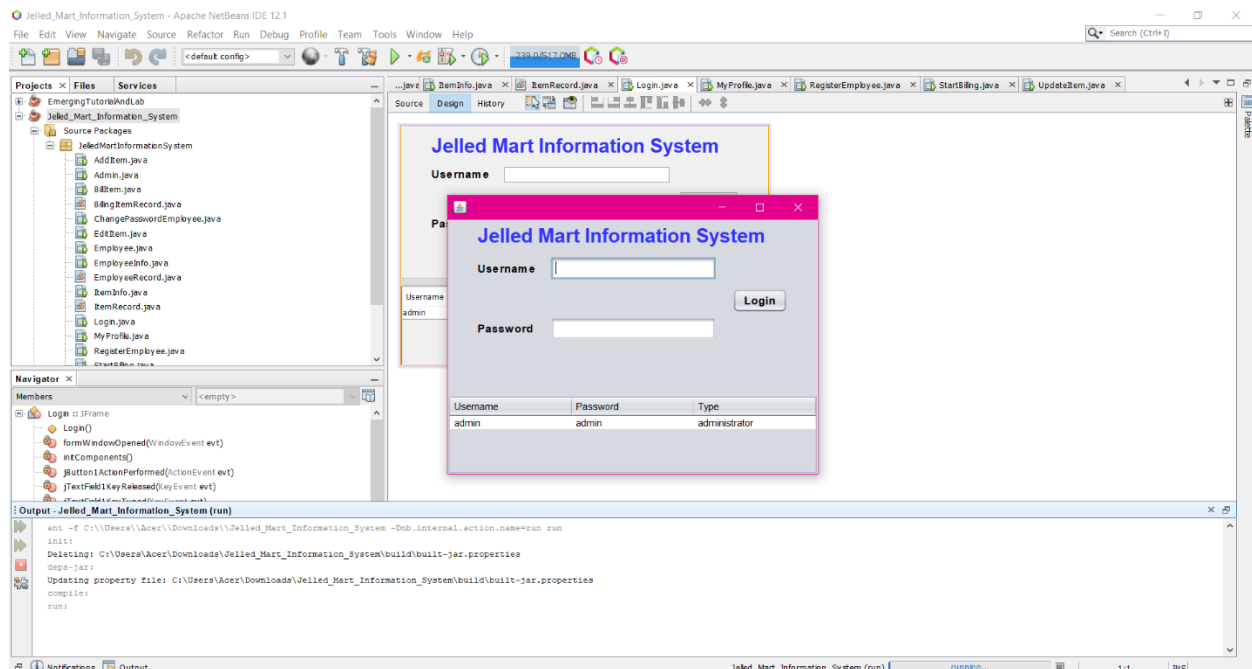


Figure 6: 7.1 Testing 1

## 7.2 Testing 2

Login with admin username and password

Objective	Login to Admin Panel when correct username and password entered
Action	Value of admin username and password were enter as given table and Login Button was clicked
Expected Result	Logged in to Admin Panel, showing Admin Panel Form
Actual Result	As correct username and password were entered as given in table, Logged in to Admin Panel
Conclusion	Test Successful

*Table 2: Testing 2*



**Jelled Mart Information System**

Username:

Password:

**Login**

Username	Password	Type
admin	admin	administrator

*Figure 7: Testing 2 (Admin Login)*



**Admin**

**Register Employee** **Employee Info**

**Add Item** **Edit Item** **Item Info**

**Log Out**

*Figure 8: Testing 2 (After Login)*

### 7.3 Testing 3

Item Data should be imported in Add Item Form table when Add Item GUI opened

Objective	Import Item Data from .csv file in Add Item Form Table when Add Item GUI opened
Action	Add Item GUI was opened clicking Add Item Button, then .csv file was imported in Add Item Form Table
Expected Result	All 12-item data imported in table of Add Item Form when opened
Actual Result	All 12-item data were imported in table of Add Item Form as opened
Conclusion	Test Successful

Table 3: Testing 3

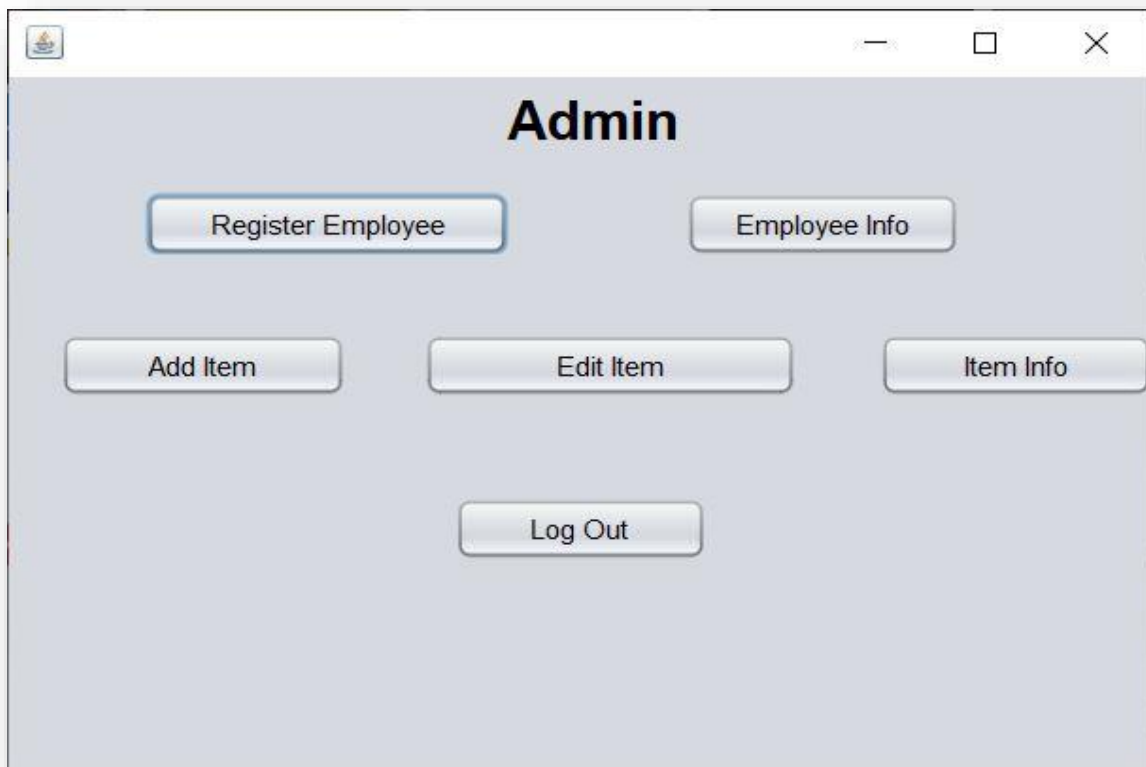


Figure 9: Testing 3 (Admin GUI)



File Help

## Add Item


**Back**

Item ID  Item Name

Item Price  Item Category **SELECT CATEGORY** ▼

Price Range ☐ Low ☐ Medium ☐ High Item Quantity

Message

 Data is Imported

**OK**

**SELECT CATEGORY** ▼ **Search by**  **Search by Price**

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
1	Apple	20	Fruits	Low	100
2	Orange	10	Fruits	Low	100
3	Mango	50	Fruits	Low	100
4	Toblerone	500	Chocolates	High	100
5	Mars	100	Chocolates	Medium	100
6	Almond	250	Dry Fruits	High	100

**Sort By Price** **Delete**

Figure 10: Testing 3 (After Add Item button is clicked)

## 7.4 Testing 4

Import Item data from File menu to add more data to the table.

Objective	More Item Data added in table of Add Item Form/GUI when open or ctrl+O clicked from file menu
Action	More Item data was Added in table of Add Item GUI when open or ctrl+O was clicked or pressed from file menu
Expected Result	More Item data should be added in table of Add Item GUI as open or ctrl+O key were clicked or pressed
Actual Result	More Item data were added in table of Add Item GUI as open or ctrl+O ket were clicked or pressed
Conclusion	Test Successful

Table 4: Testing 4

**Add Item**

File Help  
Open Ctrl+O  
Exit Escape

Item ID:

Item Name:

Item Price:

Item Category: **SELECT CATEGORY** ▼

Price Range: ☐ Low ☐ Medium ☐ High

Item Quantity:

**Add Item** **Clear**

**Item Info**

**SELECT CATEGORY** ▼ **Search by Category**  **Search by Price**

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
1	Apple	20	Fruits	Low	100
2	Orange	10	Fruits	Low	100
3	Mango	50	Fruits	Low	100
4	Toblerone	500	Chocolates	High	100
5	Mars	100	Chocolates	Medium	100
6	Assorted	250	Box Chocolates	High	100

**Sort By Price** **Delete**

Figure 11: Testing 4 (Opening file menu)

File Help

## Add Item


**Back**

Item ID  Item Name

Item Price  Item Category **SELECT CATEGORY** ▼

Price Range ☐ Low ☐ Medium ☐ High Item Quantity

Message X

 Data is Imported

**OK**

**SELECT CATEGORY** ▼ **Search by Category**  **Search by Price**

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
7	Walnut	200	Dry fruits	High	100
8	Spinach	80	Vegetables	Medium	100
9	Potato	60	Vegetables	Medium	100
10	Spinach	40	Vegetables	Low	100
11	Lassi	30	Dairy Products	Low	100
12	Dahi	25	Dairy Products	Low	100

**Sort By Price** **Delete**

Figure 12: Testing 4 (Importing more data in table)

## 7.5 Testing 5

Adding items manually to the table

Objective	Add Item in Table when all the jTextField, jCombobox, jRadioButton were filled and Add Item Button get clicked
Action	After filling all the jTextField, jComboBox, jRadioButton item was added in Table as Add Item Button was clicked
Expected Result	Item should be added in table as Add Item Button was clicked after filling all jTextField, jComboBox, jRadioButton
Actual Result	Item get added after filling jTextField, jComboBox, jRadioButton and clicked in Add Item Button
Conclusion	Test Successful

Table 5: Testing 5

**Add Item**

Back

Item ID: 25

Item Name: carrot

Item Price: 150

Item Category: Vegetable

Price Range: ☒ Low ☐ Medium ☐ High

Item Quantity: 100

Add Item Clear

Success

Item is added Successfully

OK

SELECT CATEGORY Search by Search by Price

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
19	Peanut	300	Dry Fruits	High	200
20	Milk	25	Dairy Products	Low	200
21	Ice Cream	200	Dairy Products	Medium	200
22	Kale	90	Vegetables	Medium	200
23	Beet root	70	Vegetables	Medium	200
24	Cauliflower	35	Vegetables	Low	200

Sort By Price Delete

Figure 13: Testing 5 (Adding item manually)

File Help

Back

Add Item

Item ID

Item Name

Item Price

Item Category

SELECT CATEGORY ▼

Price Range

☐ Low ☐ Medium ☐ High

Item Quantity

Add Item

Clear

Item Info

SELECT CATEGORY ▼

Search by Category

Search by Price

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
20	Milk	20	Dairy Products	Low	200
21	Ice Cream	200	Dairy Products	Medium	200
22	Kale	90	Vegetables	Medium	200
23	Beet root	70	Vegetables	Medium	200
24	Cauliflower	35	Vegetables	Low	200
25	carrot	150	Vegetable	Low	100

Sort By Price

Delete

## 7.6 Testing 6

Sorting items by price

Objective	All Item data present in Add Item GUI Table sort in ascending order as Sort by Price button is clicked
Action	As soon as Sort by Price button was clicked, all the item data present in table of Add Item GUI sort
Expected Result	All Item in Table of Add Item GUI should be sort in ascending order when clicked in Sort by Price button
Actual Result	All Item in Table of Add Item GUI, sort in ascending order as clicked in Sort by Price button
Conclusion	Test Successful

Table 6: Testing 6

The screenshot shows a Java Swing window titled "Add Item" with a menu bar (File, Help). It contains two main sections: "Add Item" and "Item Info".

**Add Item Section:**

- Buttons: Back, Add Item, Clear
- Fields: Item ID, Item Name, Item Price, Item Category (dropdown), Item Quantity
- Price Range: Radio buttons for Low, Medium, High

**Item Info Section:**

- Buttons: Search by Category, Search by Price, Sort By Price, Delete
- Field: Item Category (dropdown)

**Item Table:**

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
1	Apple	20	Fruits	Low	100
2	Orange	10	Fruits	Low	100
3	Mango	50	Fruits	Low	100
4	Toblerone	500	Chocolates	High	100
5	Mars	100	Chocolates	Medium	100
6	Almond	250	Box Fruits	High	100

Figure 15: Testing 6 (Before Sorting)

File Help

Back

Add Item

Item ID

Item Name

Item Price

Item Category

SELECT CATEGORY ▼

Price Range

☐ Low
☐ Medium
☐ High

Item Quantity

SELECT CATEGORY ▼

Search by

Search by Price

Sort By Price

Delete

Success

i

Successfully sorted

OK

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
2	Orange	10	Fruits	Low	100
1	Apple	20	Fruits	Low	100
12	Dahi	25	Dairy Products	Low	100
11	Lassi	30	Dairy Products	Low	100
10	Spinach	40	Vegetables	Low	100
2	Mango	50	Fruits	Low	100

Figure 16: Testing 6 (After Sorting)

## 7.7 Testing 7

Search items by price

Objective	That Item data is show in Message Panel as that respective price is enter and search button is clicked
Action	As price in enter in jTextField and search button was clicked then item data at first is shown in Message Panel
Expected Result	Item data should show in Message Panel as price in enter in jTextField and search button is clicked
Actual Result	Item data is shown in Message Panel as price is enter in jTextField and search button is clicked
Conclusion	Test Successful

*Table 7: Testing 7*



**Add Item**

Back

Item ID:

Item Name:

Item Price:

Item Category: **SELECT CATEGORY** ▼

Price Range: ☐ Low ☐ Medium ☐ High

Item Quantity:

Clear

**Message**

Item-ID : 3  
Item-Name : Mango  
Item-Price : 50  
Item-Category : Fruits  
Price-Range : Low  
Item-Quantity : 100

OK

**SELECT CATEGORY** ▼

50

**Search by Price**

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
3	Mango	50	Fruits	Low	100

**Sort By Price** **Delete**

*Figure 18: Testing 7 (Searching by Price)*

## 7.8 Testing 8

Search no in items in a category

Objective	All Item Name is show in Message Panel as one category form jComboBox is selected and Search by Category button is clicked
Action	As one category is selected from jComboBox and Search by Category button is clicked, all Item Name is shown in Message Panel
Expected Result	All Item Name should be shown in Message Panel, when one category is selected from jComboBox and Search by Category button is clicked
Actual Result	All Item Name is shown in Message Panel, as one category is selected from jComboBox and Search by Category button is clicked
Conclusion	Test Successful

Table 8: Testing 8

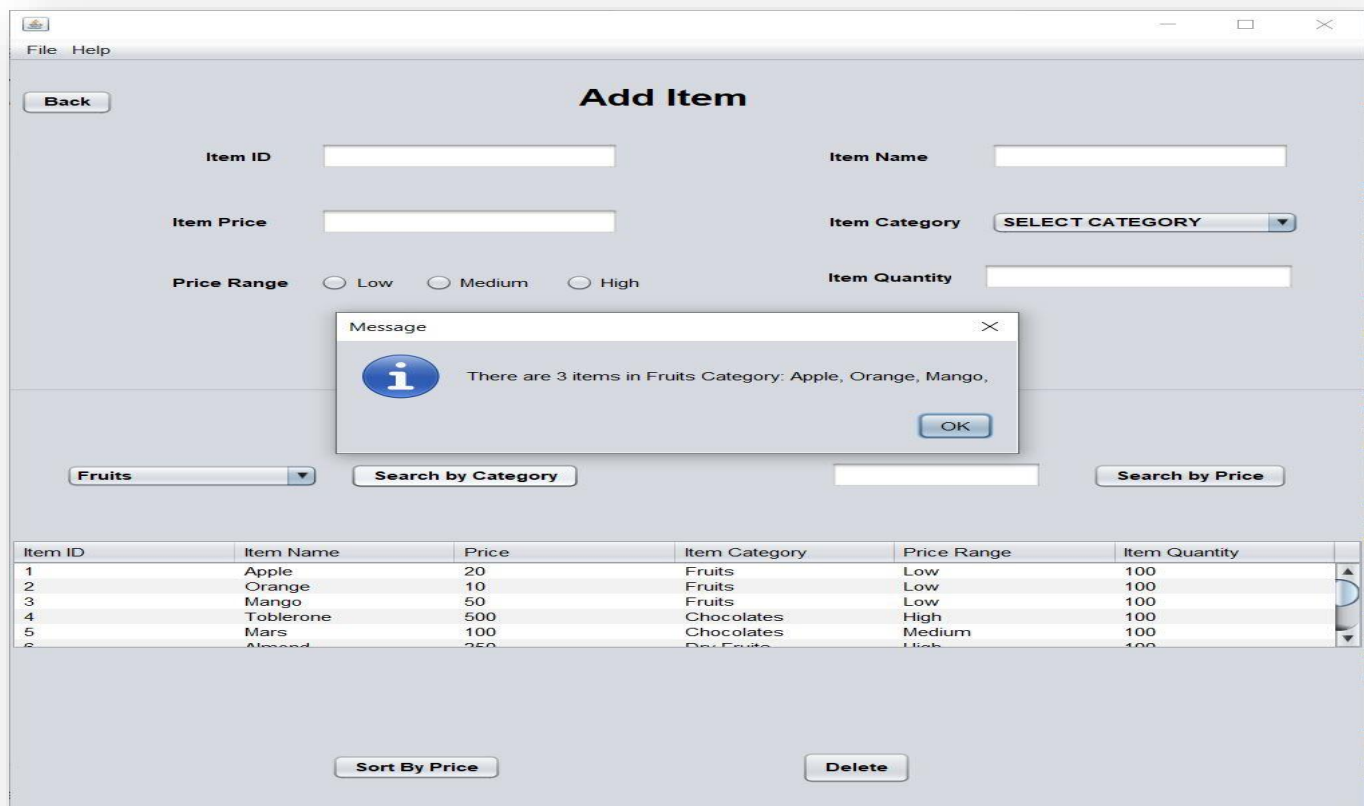


Figure 19: Testing 8 (Search item name by category)

## 7.9 Testing 9

Delete row from table

Objective	Deleting a row from table in UpdateItem java file.
Action	Selecting a row from a table and clicking on Delete button and clicking on Yes button in UpdateItem java file.
Expected Result	The row must be deleted without any errors.
Actual Result	The row was deleted without any errors.
Conclusion	Test Successful.

Table 9: Testing 9

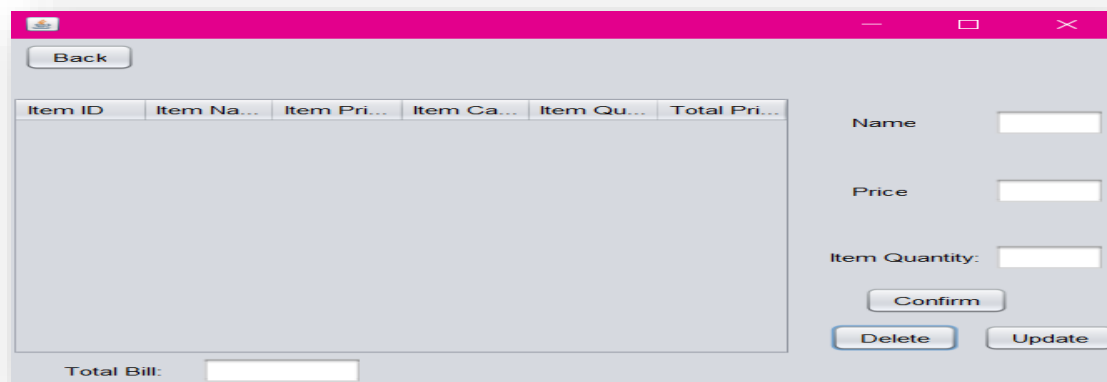
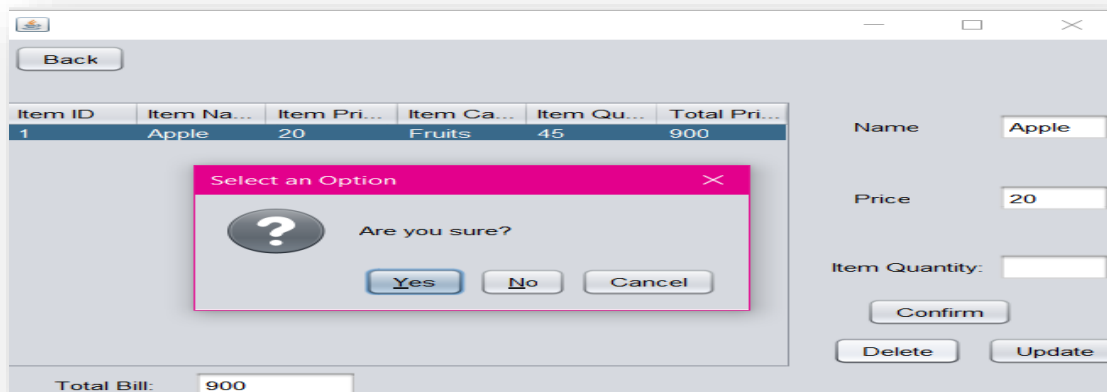


Figure 20: 7.9 Testing 9

## 7.10 Testing 10

Validation while adding items

Objective	Showing a dialogue box if wrong input.
Action	Entering String value on Item ID from AddItem java file.
Expected Result	Provide a dialogue box with error if wrong input.
Actual Result	Provided a dialogue box with "Please Enter Integer Value in ID".
Conclusion	Test Successful.

*Table 10: Testing 10*

**Add Item**

Back

Item ID: String

Item Name: Papaya

Item Price: 20

Item Category: Fruits

Price Range: ☐ Low ☒ Medium ☐ High

Item Quantity: 50

Add Item Clear

Please Enter Integer Value in ID

Error

OK

SELECT CATEGORY Search Search by Price

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
1	Apple	20	Fruits	Low	100
2	Orange	10	Fruits	Low	100
3	Mango	50	Fruits	Low	100
4	Toblerone	500	Chocolates	High	100
5	Mars	100	Chocolates	Medium	100
6	Almond	250	Dark Fruits	High	100

Sort By Price Delete

Figure 21: 7.10 Testing 10

## Validation while adding items

Objective	Showing a dialogue box if no values in a text field.
Action	Not providing any value in AddItem java file.
Expected Result	Provide a dialogue box with error if no values.
Actual Result	Provided a dialogue box with "Can't Leave Empty in ID".
Conclusion	Test Successful.

Table 11: Testing 10.1

**Add Item**

Back

Item ID:

Item Name:

Item Price:

Item Category: **SELECT CATEGORY** ▼

Price Range: ☐ Low ☐ Medium ☐ High

Item Quantity:

Add Item Clear

Can't Leave Empty in ID

Error

OK

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
1	Apple	20	Fruits	Low	100
2	Orange	10	Fruits	Low	100
3	Mango	50	Fruits	Low	100
4	Toblerone	500	Chocolates	High	100
5	Mars	100	Chocolates	Medium	100
6	Almond	250	Dark Fruits	High	100

SELECT CATEGORY ▼ Search by C Search by Price

Sort By Price Delete

Figure 22: 7.10 Testing 10.2

## Validation while adding items

Objective	Showing a dialogue box if duplicate data.
Action	Entering 1 on Item ID text field from AddItem java file.
Expected Result	Provide a dialogue box with error if entering the repeated ID from a table.
Actual Result	Provided a dialogue box with "Item Id already added".
Conclusion	Test Successful.

Table 12: Testing 10.3

The screenshot shows a Java Swing window titled "Add Item". It contains several input fields and buttons. An error dialog box is displayed in the center, indicating that the entered Item ID (1) is already present in the database. The dialog box has a red octagonal icon with an exclamation mark and the text "Error".

The "Add Item" form includes the following fields and controls:

- Item ID:** Text field containing "1".
- Item Name:** Text field containing "Apple".
- Item Price:** Text field containing "40".
- Item Category:** Dropdown menu set to "Fruits".
- Price Range:** Radio buttons for "Low", "Medium" (selected), and "High".
- Item Quantity:** Text field containing "40".
- Buttons:** "Back", "Add Item", "Clear", "SELECT CATEGORY", "Search", "Search by Price", "Sort By Price", and "Delete".

Below the form is a table displaying the current state of the item database:

Item ID	Item Name	Price	Item Category	Price Range	Item Quantity
1	Apple	20	Fruits	Low	100
2	Orange	10	Fruits	Low	100
3	Mango	50	Fruits	Low	100
4	Toblerone	500	Chocolates	High	100
5	Mars	100	Chocolates	Medium	100
6	Almond	250	Dark Fruits	High	100

Figure 23: 7.10 Testing 10.3

## **8. Conclusion**

The group assignment was assigned to us on the week 5 of the regular classes. At first, the concept was confusing, and it seemed to be very difficult to complete. But later on, with the discussion and guidance of our module leader, we were able to create an idea to complete this work. Tackling with the issues during coding became very easy by the discussion with friends. This project desires a great deal of labour and determination to create it attainable to run because it is supported logic and choice of correct knowledge and performance of Java programming language. On the method of coding, many errors occurred was finally completed with trails and running the program.

The accomplishment of this assignment helped us grasp a better understanding of Java and its platform NetBeans. It even developed our research and problem-solving skills. Communication and discussion during the task made us even closer and helped us build a perfect team. It was one of the ladders of our path to a better future. All things considered, it was a great experience doing this coursework as it helped me learn much more about coding and the ways to make a task easier using Java Programming Language.



## 9. References

- Edureka. (2021). *Edureka*. Retrieved Jan 2021, from <https://www.edureka.co/blog/binary-search-in-java/>
- NetBeans . (2020, November 30). *NetBeans*. Retrieved from NetBeans: <https://netbeans.org/features/>
- Programiz. (2020, November 30). *Programiz*. Retrieved from Programiz: <https://www.programiz.com/java-programming>
- Rouse, M. (2014). *What is NetBeans? - Definition from WhatIs.com*. Retrieved january 17, 2021, from <https://www.theserverside.com/definition/NetBeans>
- Studytonight. (2021). *Studytonight* . Retrieved Jan 2021, from <https://www.studytonight.com/data-structures/binary-search-algorithm>
- tutorialspoint. (2021, 1 18). *Data Structure and Algorithms Selection Sort*. Retrieved from tutorialspoint: [https://www.tutorialspoint.com/data\\_structures\\_algorithms/selection\\_sort\\_algorithm.htm](https://www.tutorialspoint.com/data_structures_algorithms/selection_sort_algorithm.htm)
- Wikipedia. (2020, November 30). *Wikipedia*. Retrieved from Wikipedia: <https://en.wikipedia.org/wiki/Balsamiq>

## 10. Appendix A

### A) AddItem.java

```
/*  
  
 * 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.  
 */  
  
package JelledMartInformationSystem;  
  
  
  
  
import java.awt.Desktop;  
import java.io.BufferedReader;  
import java.io.File;  
import java.io.FileReader;  
import java.io.IOException;  
import java.util.ArrayList;  
import javax.swing.JOptionPane;  
import javax.swing.RowFilter;  
import javax.swing.table.DefaultTableModel;  
import javax.swing.table.TableRowSorter;  
  
/**
```

\*

\* @author User

\*/

```
public class AddItem extends javax.swing.JFrame {
```

```
    public static ArrayList<ItemRecord> item = new ArrayList<ItemRecord>();
```

```
    DefaultTableModel dtm;
```

```
    String[] iCat;
```

```
    int[] n;
```

```
    /**
```

```
     * Creates new form AddItem
```

```
     */
```

```
    public AddItem() {
```

```
        initComponents();
```

```
    }
```

```
    /**
```

```
     * 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() {  
  
    jLabel12 = new javax.swing.JLabel();  
    buttonGroup1 = new javax.swing.ButtonGroup();  
    jMenu1 = new javax.swing.JMenu();  
    JMenuItem3 = new javax.swing.JMenuItem();  
    jPanel1 = new javax.swing.JPanel();  
    jPanel2 = new javax.swing.JPanel();  
    jLabel1 = new javax.swing.JLabel();  
    jLabel2 = new javax.swing.JLabel();  
    jLabel3 = new javax.swing.JLabel();  
    jLabel4 = new javax.swing.JLabel();  
    jLabel5 = new javax.swing.JLabel();  
    jTextField1 = new javax.swing.JTextField();  
    jTextField2 = new javax.swing.JTextField();  
    jTextField3 = new javax.swing.JTextField();  
    jComboBox1 = new javax.swing.JComboBox<>();  
    jButton1 = new javax.swing.JButton();  
    jButton2 = new javax.swing.JButton();  
    jLabel7 = new javax.swing.JLabel();  
    jTextField4 = new javax.swing.JTextField();  
    jLabel6 = new javax.swing.JLabel();  
}
```

```
jLabel8 = new javax.swing.JLabel();  
jLabel9 = new javax.swing.JLabel();  
jLabel10 = new javax.swing.JLabel();  
jLabel13 = new javax.swing.JLabel();  
jLabel14 = new javax.swing.JLabel();  
jButton3 = new javax.swing.JButton();  
jSeparator1 = new javax.swing.JSeparator();  
jLabel11 = new javax.swing.JLabel();  
jTextField5 = new javax.swing.JTextField();  
jButton5 = new javax.swing.JButton();  
jComboBox2 = new javax.swing.JComboBox<>();  
jButton6 = new javax.swing.JButton();  
jScrollPane1 = new javax.swing.JScrollPane();  
jTable1 = new javax.swing.JTable();  
jLabel15 = new javax.swing.JLabel();  
jRadioButton1 = new javax.swing.JRadioButton();  
jRadioButton2 = new javax.swing.JRadioButton();  
jRadioButton3 = new javax.swing.JRadioButton();  
jButton4 = new javax.swing.JButton();  
jButton7 = new javax.swing.JButton();  
jMenuBar1 = new javax.swing.JMenuBar();  
jMenu2 = new javax.swing.JMenu();  
jMenuItem1 = new javax.swing.JMenuItem();
```

```
jMenuItem2 = new javax.swing.JMenuItem();

jMenu3 = new javax.swing.JMenu();

jMenuItem4 = new javax.swing.JMenuItem();


jLabel12.setBackground(new java.awt.Color(255, 51, 0));

jLabel12.setFont(new java.awt.Font("Times New Roman", 1, 12)); // NOI18N

jLabel12.setForeground(new java.awt.Color(255, 51, 51));


jMenu1.setText("jMenu1");


jMenuItem3.setText("jMenuItem3");


setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
addWindowListener(new java.awt.event.WindowAdapter() {
    public void windowOpened(java.awt.event.WindowEvent evt) {
        formWindowOpened(evt);
    }
});


jLabel1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N

jLabel1.setText("Item ID");


jLabel2.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
```

```
jLabel2.setText("Item Name");
```

```
jLabel3.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
```

```
jLabel3.setText("Item Price");
```

```
jLabel4.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
```

```
jLabel4.setText("Item Category");
```

```
jLabel5.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
```

```
jLabel5.setText("Item Quantity");
```

```
jComboBox1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
```

```
jComboBox1.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {  
"SELECT CATEGORY", "Fruits", "Chocolates", "Dry Fruit", "Vegetable", "Dairy  
Products" }));
```

```
jButton1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
```

```
jButton1.setText("Add Item");
```

```
jButton1.addActionListener(new java.awt.event.ActionListener() {
```

```
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        jButton1ActionPerformed(evt);
```

```
    }
```

```
});
```

```
jButton2.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jButton2.setText("Back");  
jButton2.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton2ActionPerformed(evt);  
    }  
});
```

```
jLabel7.setFont(new java.awt.Font("Arial", 1, 24)); // NOI18N  
jLabel7.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);  
jLabel7.setText("Add Item");
```

```
jLabel6.setBackground(new java.awt.Color(255, 51, 0));  
jLabel6.setFont(new java.awt.Font("Times New Roman", 1, 12)); // NOI18N  
jLabel6.setForeground(new java.awt.Color(255, 51, 51));
```

```
jLabel8.setBackground(new java.awt.Color(255, 51, 0));  
jLabel8.setFont(new java.awt.Font("Times New Roman", 1, 12)); // NOI18N  
jLabel8.setForeground(new java.awt.Color(255, 51, 51));
```

```
jLabel9.setBackground(new java.awt.Color(255, 51, 0));  
jLabel9.setFont(new java.awt.Font("Times New Roman", 1, 12)); // NOI18N
```



```
jLabel9.setForeground(new java.awt.Color(255, 51, 51));

jLabel10.setBackground(new java.awt.Color(255, 51, 0));
jLabel10.setFont(new java.awt.Font("Times New Roman", 1, 12)); // NOI18N
jLabel10.setForeground(new java.awt.Color(255, 51, 51));

jLabel13.setBackground(new java.awt.Color(255, 51, 0));
jLabel13.setFont(new java.awt.Font("Times New Roman", 1, 12)); // NOI18N
jLabel13.setForeground(new java.awt.Color(255, 51, 51));

jLabel14.setBackground(new java.awt.Color(0, 0, 204));
jLabel14.setFont(new java.awt.Font("Times New Roman", 1, 14)); // NOI18N
jLabel14.setForeground(new java.awt.Color(0, 51, 153));

jButton3.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jButton3.setText("Clear");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

jSeparator1.setBackground(new java.awt.Color(51, 51, 51));
```

```
jLabel11.setFont(new java.awt.Font("Arial", 1, 24)); // NOI18N  
jLabel11.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);  
jLabel11.setText("Item Info");
```

```
jTextField5.addMouseListener(new java.awt.event.MouseAdapter() {  
    public void mouseReleased(java.awt.event.MouseEvent evt) {  
        jTextField5MouseReleased(evt);  
    }  
});
```

```
jTextField5.addKeyListener(new java.awt.event.KeyAdapter() {  
    public void keyReleased(java.awt.event.KeyEvent evt) {  
        jTextField5KeyReleased(evt);  
    }  
});
```

```
jButton5.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jButton5.setText("Search by Price");  
jButton5.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton5ActionPerformed(evt);  
    }  
});
```

```

jComboBox2.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N

jComboBox2.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {
"SELECT CATEGORY", "Fruits", "Chocolates", "Dry Fruit", "Vegetable", "Dairy
Products" }));

jButton6.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N

jButton6.setText("Search by Category");

jButton6.addActionListener(new java.awt.event.ActionListener() {

    public void actionPerformed(java.awt.event.ActionEvent evt) {

        jButton6ActionPerformed(evt);

    }

});

jTable1.setModel(new javax.swing.table.DefaultTableModel(

    new Object [][] {

        },

    new String [] {

        "Item ID", "Item Name", "Price", "Item Category", "Price Range", "Item
Quantity"

    }

) {

```

```
        boolean[] canEdit = new boolean [] {  
            false, false, false, false, false, false  
        };  
  
        public boolean isCellEditable(int rowIndex, int columnIndex) {  
            return canEdit [columnIndex];  
        }  
    });  
  
    jScrollPane1.setViewportViewView(jTable1);  
  
    if (jTable1.getColumnModel().getColumnCount() > 0) {  
        jTable1.getColumnModel().getColumn(0).setResizable(false);  
        jTable1.getColumnModel().getColumn(1).setResizable(false);  
        jTable1.getColumnModel().getColumn(2).setResizable(false);  
        jTable1.getColumnModel().getColumn(3).setResizable(false);  
        jTable1.getColumnModel().getColumn(4).setResizable(false);  
        jTable1.getColumnModel().getColumn(5).setResizable(false);  
    }  
  
    jLabel15.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
    jLabel15.setText("Price Range");  
  
    buttonGroup1.add(jRadioButton1);  
  
    jRadioButton1.setText("Low");
```

```
buttonGroup1.add(jRadioButton2);

jRadioButton2.setText("Medium");


buttonGroup1.add(jRadioButton3);

jRadioButton3.setText("High");


javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

    .addComponent(jSeparator1)

    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup()

        .addGap(33, 33, 33)

        .addComponent(jComboBox2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addGap(18, 18, 18)

        .addComponent(jButton6)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
```

```
.addComponent(jTextField5, javax.swing.GroupLayout.PREFERRED_SIZE,
127, javax.swing.GroupLayout.PREFERRED_SIZE)

.addGap(30, 30, 30)

.addComponent(jButton5)

.addGap(46, 46, 46))

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup())

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel2Layout.createSequentialGroup())

.addGap(117, 117, 117)

.addComponent(jLabel1)

.addGap(29, 29, 29))

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup())

.addContainerGap()

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(jLabel15)

.addComponent(jLabel3))

.addGap(18, 18, 18)))
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jPanel2Layout.createSequentialGroup()
```

```
        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)
```

```
            .addComponent(jTextField3,  
                javax.swing.GroupLayout.Alignment.LEADING,  
                javax.swing.GroupLayout.DEFAULT_SIZE, 179, Short.MAX_VALUE)
```

```
            .addComponent(jTextField1,  
                javax.swing.GroupLayout.Alignment.LEADING)
```

```
            .addComponent(jLabel10,  
                javax.swing.GroupLayout.Alignment.LEADING,  
                javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,  
                Short.MAX_VALUE)
```

```
            .addComponent(jLabel9,  
                javax.swing.GroupLayout.Alignment.LEADING,  
                javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,  
                Short.MAX_VALUE)
```

```
            .addComponent(jLabel8,  
                javax.swing.GroupLayout.Alignment.LEADING,  
                javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,  
                Short.MAX_VALUE))
```

```
        .addGap(126, 126, 126)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
.addGroup(jPanel2Layout.createSequentialGroup())

    .addComponent(jLabel2)

    .addGap(37, 37, 37)

    .addComponent(jTextField2,
javax.swing.GroupLayout.PREFERRED_SIZE, 179,
javax.swing.GroupLayout.PREFERRED_SIZE))

    .addGroup(jPanel2Layout.createSequentialGroup())

    .addComponent(jLabel4)

    .addGap(18, 18, 18)

    .addComponent(jComboBox1,
javax.swing.GroupLayout.PREFERRED_SIZE, 185,
javax.swing.GroupLayout.PREFERRED_SIZE))))

    .addGroup(jPanel2Layout.createSequentialGroup())

    .addComponent(jRadioButton1)

    .addGap(18, 18, 18)

    .addComponent(jRadioButton2)

    .addGap(21, 21, 21)

    .addComponent(jRadioButton3)

    .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING))

    .addGroup(jPanel2Layout.createSequentialGroup())

    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```



```
.addComponent(jLabel6,  
javax.swing.GroupLayout.PREFERRED_SIZE, 179,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
  
.addGroup(jPanel2Layout.createSequentialGroup()  
  
.addGap(113, 113, 113)  
  
.addComponent(jLabel5)  
  
.addGap(18, 18, 18)  
  
.addComponent(jTextField4,  
javax.swing.GroupLayout.PREFERRED_SIZE, 187,  
javax.swing.GroupLayout.PREFERRED_SIZE))))))  
  
.addGap(0, 39, Short.MAX_VALUE))  
  
.addGroup(javax.swing.GroupLayout.Alignment.TRAILING,  
jPanel2Layout.createSequentialGroup()  
  
.addGap(183, 183, 183)  
  
.addComponent(jLabel13, javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
  
.addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE,  
124, javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addGap(85, 85, 85)  
  
.addComponent(jButton3)  
  
.addGap(277, 277, 277))  
  
.addGroup(jPanel2Layout.createSequentialGroup()
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jPanel2Layout.createSequentialGroup()
```

```
        .addContainerGap()
```

```
        .addComponent(jButton2)
```

```
        .addGap(278, 278, 278)
```

```
        .addComponent(jLabel7))
```

```
    .addGroup(jPanel2Layout.createSequentialGroup()
```

```
        .addGap(352, 352, 352)
```

```
        .addComponent(jLabel11))
```

```
    .addGroup(jPanel2Layout.createSequentialGroup()
```

```
        .addGap(66, 66, 66)
```

```
        .addComponent(jLabel14,
```

```
        javax.swing.GroupLayout.PREFERRED_SIZE, 156,
```

```
        javax.swing.GroupLayout.PREFERRED_SIZE)))
```

```
    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,  
    Short.MAX_VALUE))
```

```
    .addComponent(jScrollPane1)
```

```
);
```

```
jPanel2Layout.setVerticalGroup(
```

```
jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jPanel2Layout.createSequentialGroup()
```

```
.addGap(20, 20, 20)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BA
SELINE)

    .addComponent(jLabel7)

    .addComponent(jButton2))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addComponent(jLabel8, javax.swing.GroupLayout.PREFERRED_SIZE, 15,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGap(9, 9, 9)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LE
ADING)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BA
SELINE)

    .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

    .addComponent(jLabel1))

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BA
SELINE)

    .addComponent(jLabel2)
```

```
.addComponent(jTextField2,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE)))  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
  
.addComponent(jLabel9, javax.swing.GroupLayout.PREFERRED_SIZE, 15,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addGap(20, 20, 20)  
  
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BA  
SELINE)  
  
.addComponent(jTextField3,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addComponent(jLabel3)  
  
.addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE,  
23, javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addComponent(jComboBox1,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
  
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LE  
ADING)  
  
.addGroup(jPanel2Layout.createSequentialGroup())
```

```
.addGap(24, 24, 24)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BA  
SELINE)
```

```
.addComponent(jLabel5)
```

```
.addComponent(jTextField4,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE,  
15, javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
.addGroup(jPanel2Layout.createSequentialGroup())
```

```
.addGap(35, 35, 35)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BA  
SELINE)
```

```
.addComponent(jLabel15)
```

```
.addComponent(jRadioButton1)
```

```
.addComponent(jRadioButton2)
```

```
.addComponent(jRadioButton3)))
```

```
.addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE,  
15, javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
.addGap(39, 39, 39)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
```

```
    .addComponent(jLabel13, javax.swing.GroupLayout.PREFERRED_SIZE, 15, javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
    .addComponent(jButton1)
```

```
    .addComponent(jButton3)))
```

```
.addGap(18, 18, Short.MAX_VALUE)
```

```
    .addComponent(separator1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
.addGap(18, 18, 18)
```

```
.addComponent(jLabel11)
```

```
.addGap(29, 29, 29)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
    .addComponent(jButton5)
```

```
    .addComponent(jTextField5, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
```

```

        .addComponent(jComboBox2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addComponent(jButton6))

        .addGap(54, 54, 54)

        .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
116, javax.swing.GroupLayout.PREFERRED_SIZE)

        .addGap(316, 316, 316)

        .addComponent(jLabel14, javax.swing.GroupLayout.PREFERRED_SIZE, 23,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addGap(444, 444, 444))

    );

    javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
    jPanel1.setLayout(jPanel1Layout);
    jPanel1Layout.setHorizontalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()

            .addGap(0, 0, Short.MAX_VALUE)

            .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

```

```

    );

    jPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jPanel1Layout.createSequentialGroup()

            .addContainerGap()

                .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, 699,
javax.swing.GroupLayout.PREFERRED_SIZE)

                    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

        );

jButton4.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jButton4.setText("Sort By Price");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});

jButton7.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jButton7.setText("Delete");
jButton7.addActionListener(new java.awt.event.ActionListener() {

```



```
        public void actionPerformed(java.awt.event.ActionEvent evt) {  
            jButton7ActionPerformed(evt);  
        }  
    });
```

```
jMenu2.setText("File");
```

```
jMenuItem1.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_O, java.awt.event.InputEvent.CTRL_DOWN_MASK));
```

```
jMenuItem1.setText("Open");
```

```
jMenuItem1.addActionListener(new java.awt.event.ActionListener() {
```

```
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        jMenuItem1ActionPerformed(evt);
```

```
    }
```

```
});
```

```
jMenu2.add(jMenuItem1);
```

```
jMenuItem2.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_ESCAPE, 0));
```

```
jMenuItem2.setText("Exit");
```

```
jMenuItem2.addActionListener(new java.awt.event.ActionListener() {
```

```
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        jMenuItem2ActionPerformed(evt);
    }

});

jMenu2.add(jMenuItem2);


jMenuBar1.add(jMenu2);


jMenu3.setText("Help");


jMenuItem4.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_P, java.awt.event.InputEvent.ALT_DOWN_MASK));

jMenuItem4.setText("User Guide");

jMenuItem4.addActionListener(new java.awt.event.ActionListener() {

    public void actionPerformed(java.awt.event.ActionEvent evt) {

        jMenuItem4ActionPerformed(evt);

    }

});

jMenu3.add(jMenuItem4);


jMenuBar1.add(jMenu3);


setJMenuBar(jMenuBar1);
```



```
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, 653,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
76, Short.MAX_VALUE)
```

```
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
    .addComponent(jButton4)
```

```
    .addComponent(jButton7, javax.swing.GroupLayout.PREFERRED_SIZE,
33, javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
    .addGap(31, 31, 31))
```

```
);
```

```
pack();
```

```
setLocationRelativeTo(null);
```

```
}// </editor-fold>
```

```
static boolean isNumber(String s) {
```

```
    for (int i = 0; i < s.length(); i++) {
```

```
        if (Character.isDigit(s.charAt(i)) == false) {
```

```
            return false;
```

```
        }
```

```
    }
```

```
return true;
```

```
}
```

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
```

```
    // TODO add your handling code here:
```

```
    String itemName = jTextField2.getText().toLowerCase().trim();
```

```
    String itemCategory = (String) jComboBox1.getSelectedItem();
```

```
    String priceRange = "";
```

```
    if (jRadioButton1.isSelected()) {
```

```
        priceRange = priceRange + jRadioButton1.getText().trim();
```

```
    }
```

```
    if (jRadioButton2.isSelected()) {
```

```
        priceRange = priceRange + jRadioButton2.getText().trim();
```

```
    }
```

```
    if (jRadioButton3.isSelected()) {
```

```
        priceRange = priceRange + jRadioButton3.getText().trim();
```

```
    }
```

```
    //ID Validation
```

```
    if (isNumber(jTextField1.getText().trim()) == false) {
```

```
        JOptionPane.showMessageDialog(rootPane, "Error", "Please Enter Integer  
Value in ID", JOptionPane.WARNING_MESSAGE);  
  
        } else if (jTextField1.getText().toLowerCase().trim().isEmpty() == true) {  
  
            JOptionPane.showMessageDialog(rootPane, "Error", "Can't Leave Empty in ID",  
JOptionPane.WARNING_MESSAGE);  
  
        } //Item Name Validation  
  
        else if (itemName.isEmpty() == true) {  
  
            JOptionPane.showMessageDialog(rootPane, "Error", "Can't Leave Empty in  
Name", JOptionPane.WARNING_MESSAGE);  
  
        } else if (itemName.matches(".*\\d.*")) {  
  
            JOptionPane.showMessageDialog(rootPane, "Only Text Value can be entered  
in item Name", "Error", JOptionPane.ERROR_MESSAGE);  
  
        } else if (isNumber(jTextField3.getText().trim()) == false) {  
  
            JOptionPane.showMessageDialog(rootPane, "Error", "Please Enter Integer  
Value in Price", JOptionPane.WARNING_MESSAGE);  
  
        } else if (jTextField3.getText().toLowerCase().trim().isEmpty() == true) {  
  
            JOptionPane.showMessageDialog(rootPane, "Error", "Can't Leave Empty in  
Price", JOptionPane.WARNING_MESSAGE);  
  
        } else if (itemCategory == "SELECT CATEGORY") {  
  
            JOptionPane.showMessageDialog(rootPane, "Error", "Can't Leave Empty in  
Item Category", JOptionPane.WARNING_MESSAGE);  
  
        } else if (isNumber(jTextField4.getText().trim()) == false) {  
  
            JOptionPane.showMessageDialog(rootPane, "Error", "Please Enter Integer  
Value in Quantity", JOptionPane.WARNING_MESSAGE);  
  
        } else if (jTextField4.getText().toLowerCase().trim().isEmpty() == true) {
```

```
JOptionPane.showMessageDialog(rootPane, "Error", "Can't Leave Empty in  
Item Quantity", JOptionPane.WARNING_MESSAGE);
```

```
} else if (priceRange == "") {
```

```
JOptionPane.showMessageDialog(rootPane, "Error", "Can't Leave Empty in  
Price Range", JOptionPane.WARNING_MESSAGE);
```

```
} else {
```

```
int ild = Integer.parseInt(jTextField1.getText().trim());
```

```
int iPrice = Integer.parseInt(jTextField3.getText().trim());
```

```
int iQuantity = Integer.parseInt(jTextField4.getText().trim());
```

```
for (ItemRecord ir : item) {
```

```
    System.out.println(ir.getItemId());
```

```
}
```

```
int exit = 1;
```

```
for (ItemRecord ir : item) {
```

```
    if (ild == ir.getItemId()) {
```

```
        exit = 2;
```

```
        break;
```

```
    } else if (ir.getItemName().toLowerCase().compareTo(itemName) == 0) {
```

```
        exit = 3;

        break;
    }

}

if (exit == 2) {

    JOptionPane.showMessageDialog(rootPane, "Error", "Item ID already added",
JOptionPane.ERROR_MESSAGE);

    } else if (exit == 3) {

        JOptionPane.showMessageDialog(rootPane, "Error", "Item Name already
exit", JOptionPane.ERROR_MESSAGE);

        } else if (exit == 1) {

            ItemRecord itm = new ItemRecord(iId, itemName, iPrice, itemCategory,
priceRange, iQuantity);

            item.add(itm);

            addTable();

            JOptionPane.showMessageDialog(rootPane, "Success", "Item is added
Successfully", JOptionPane.INFORMATION_MESSAGE);

            jTextField1.setText("");

            jTextField2.setText("");
```



```
        jTextField3.setText("");  
        jComboBox1.setSelectedIndex(0);  
        jTextField4.setText("");  
        buttonGroup1.clearSelection();  
    }  
  
}  
  
}  
  
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
  
    setVisible(false);  
  
    Admin ad = new Admin();  
    ad.setVisible(true);  
}  
  
  
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
  
    selectionSort(2);  
}
```

```
private void addTable() {

    dtm = (DefaultTableModel) jTable1.getModel();

    dtm.setRowCount(0);

    for (ItemRecord itm2 : item) {

        int itID = itm2.getItemID();

        String itemName = itm2.getItemName();

        int price = itm2.getItemPrice();

        String category = itm2.getItemCategory();

        String priceRange = itm2.getPriceRange();

        int quantity = itm2.getItemQuantity();

        Object[] o = {itID, itemName, price, category, priceRange, quantity};

        dtm.addRow(o);

    }

}

private boolean openCurrentFile(String filePath) {

    boolean isImported = false;

    BufferedReader ab = null;

    String lineReader = "";
```

```
try {  
    ab = new BufferedReader(new FileReader(filePath));  
  
    while ((lineReader = ab.readLine()) != null) {  
  
        String[] line = lineReader.split(",");  
  
        int iid = Integer.parseInt(line[0]);  
  
        String name = line[1];  
  
        int price = Integer.parseInt(line[2]);  
  
        String category = line[3];  
  
        String priceRange = line[4];  
  
        int iqty = Integer.parseInt(line[5]);  
  
        ItemRecord itm = new ItemRecord(iid, name, price, category, priceRange,  
iqty);  
  
        item.add(itm);  
  
        addTable();  
    }  
  
    isImported = true;  
} catch (Exception e) {  
  
    JOptionPane.showMessageDialog(this, "Error Please refer to the help section",  
"Warning", JOptionPane.ERROR_MESSAGE);
```

```
        isImported = false;
    } finally {
        if (ab != null) {
            try {
                ab.close();
            } catch (IOException e) {
                e.printStackTrace();
            }
        }
        return isImported;
    }
}
```

```
private void formWindowOpened(java.awt.event.WindowEvent evt) {
    // TODO add your handling code here:

    if (Admin.count == 1) {
        Admin.count++;

        String filePath = "ItemData.csv";

        if (openCurrentFile(filePath)) {
            JOptionPane.showMessageDialog(null, " Data is Imported");
        } else {
            JOptionPane.showMessageDialog(null, "Data could not be imported");
        }
    }
}
```

```

    }
} else {
    if (item.size() != 0) {
        addTable();
    }
}

}

private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:

    String iPrice = jTextField5.getText();

    selectionSort(2);

    try {
        if (iPrice.isBlank() == false) {
            dtm.setRowCount(0);

            //item price

            int ip = Integer.parseInt(jTextField5.getText().toString());

            int li = 0;

            int hi = n.length - 1;

            int mi = (li + hi) / 2;

            while (li <= hi) {
                if (n[mi] == ip) {

```

```

        for (ItemRecord i : AddItem.item) {
            if (ip == i.getItemPrice()) {
                Object[] o = {i.getItemId(), i.getItemName(), i.getItemPrice(),
i.getItemCategory(), i.getPriceRange(), i.getItemQuantity()};

                dtm.addRow(o);

                System.out.println(n[mi]);

                JOptionPane.showMessageDialog(rootPane, i.getItemId() + " " +
i.getItemName() + " " + i.getItemPrice() + " " + i.getItemCategory() + " " +
i.getPriceRange() + " " + i.getItemQuantity());

                break;
            }

        }

        break;
    } else if (n[mi] < ip) {
        li = mi + 1;
    } else {
        hi = mi - 1;
    }

    mi = (li + hi) / 2;
}

```

```

        if (li > hi) {

            JOptionPane.showMessageDialog(rootPane, "No such item found, enter
another price");

        }

        } else {

            JOptionPane.showMessageDialog(rootPane, "Enter price please", "Error",
JOptionPane.ERROR_MESSAGE);

            table(iPrice);

        }

    } catch (NumberFormatException nfe) {

        JOptionPane.showMessageDialog(rootPane, "Enter an integer value please",
"Error", JOptionPane.ERROR_MESSAGE);

    }

}

```

```

private void jTextField5KeyReleased(java.awt.event.KeyEvent evt) {

    // TODO add your handling code here:

    String iPrice = jTextField5.getText();

    if (iPrice.isBlank() == true) {

        dtm.setRowCount(0);
    }
}

```

```

        addTable();

    }

}

private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:

    int rowCount = jTable1.getRowCount();

    int a = 0;

    String name = "";

    //Binary Search

    String iCategory = (String) jComboBox2.getSelectedItem();

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

        String jCategory = jTable1.getValueAt(i, 3).toString();

        String iName = jTable1.getValueAt(i, 1).toString();

        if (iCategory.equals(jCategory)) {

            name += iName + ", ";

            a++;

        }

    }

}

```



```
JOptionPane.showMessageDialog(rootPane, "There are " + a + " items " + "in " +
iCategory + " Category: " + name);
```

```
}
```

```
private void jMenuItem1ActionPerformed(java.awt.event.ActionEvent evt) {
```

```
// TODO add your handling code here:
```

```
if (Admin.count == 2) {
```

```
    Admin.count++;
```

```
    String filePath = "ItemData2.csv";
```

```
    if (openCurrentFile(filePath)) {
```

```
        JOptionPane.showMessageDialog(null, " Data is Imported");
```

```
    } else {
```

```
        JOptionPane.showMessageDialog(null, "Data could not be imported");
```

```
    }
```

```
} else {
```

```
    JOptionPane.showMessageDialog(null, " Data has already been Imported,
please delete all the data from the table and then open file again to import");
```

```
}
```

```
}
```

```

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:

    jTextField1.setText("");
    jTextField2.setText("");
    jTextField3.setText("");
    jComboBox1.setSelectedIndex(0);
    jTextField4.setText("");
    buttonGroup1.clearSelection();
}

```

```

private void jButton7ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:

    int a = JOptionPane.showConfirmDialog(rootPane, "Are you sure?");
    if (a == JOptionPane.OK_OPTION) {
        int row = jTable1.getSelectedRow();
        int ild = Integer.parseInt(jTable1.getValueAt(row, 0).toString());

        dtm.removeRow(row);

        for (ItemRecord ir : item) {
            if (ir.getItemId() == ild) {
                item.remove(ir);
            }
        }
    }
}

```

```

        break;
    }
}
}
if (jTable1.getRowCount() == 0) {
    Admin.count = 1;
}
}

```

```

private void jMenuItem2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    System.exit(0);
}

```

```

private void jMenuItem4ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    File file = new File("helpmenu.pdf");
    try {
        Desktop.getDesktop().open(file);
    } catch (Exception ex) {
        JOptionPane.showMessageDialog(this, "File not found");
    }
}
}

```

```
private void jTextField5MouseReleased(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:

    dtm.setRowCount(0);

    addTable();

}
```

```
private void table(String search) {
    //System.out.println(search);

    dtm = (DefaultTableModel) jTable1.getModel();

    TableRowSorter<DefaultTableModel> tr = new
TableRowSorter<DefaultTableModel>(dtm);

    jTable1.setRowSorter(tr);

    tr.setRowFilter(RowFilter.regexFilter(search));

}
```

```
public static int removeDuplicateElements(int arr[], int n) {
    if (n == 0 || n == 1) {
        return n;
    }

    int[] temp = new int[n];
```

```

    int j = 0;

    for (int i = 0; i < n - 1; i++) {

        if (arr[i] != arr[i + 1]) {

            temp[j++] = arr[i];

        }

    }

    temp[j++] = arr[n - 1];

    // Changing original array
    for (int i = 0; i < j; i++) {

        arr[i] = temp[i];

    }

    return j;

}

private void selectionSort(int col) {

    int rowCount = jTable1.getRowCount();

    n = new int[rowCount];

    if (rowCount != 0) {

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

            int num = Integer.parseInt(jTable1.getValueAt(i, col).toString());

            n[i] = num;

        }

    }

```

```
}

int length = removeDuplicateElements(n, rowCount);

if (length != 0) {

    // Selection Sort

    int min;

    int tempPrice;

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

        dtm.setRowCount(0);

        min = i;

        for (int j = i + 1; j < length; j++) {

            if (n[j] < n[min]) {

                min = j;

            }

        }

        tempPrice = n[i];

        n[i] = n[min];

        n[min] = tempPrice;

    }

}
```

```

    }

    for (int z = 0; z < length; z++) {

        for (ItemRecord it : AddItem.item) {

            int priceItem = it.getItemPrice();

            if (priceItem == n[z]) {

                Object[] o = {it.getItemId(), it.getItemName(), it.getItemPrice(),
it.getItemCategory(), it.getPriceRange(), it.getItemQuantity()};

                dtm.addRow(o);

            }

        }

    }

}

}

}

/**
 * @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());
            break;
        }
    }
} catch (ClassNotFoundException ex) {
```

```
    java.util.logging.Logger.getLogger(AddItem.class.getName()).log(java.util.logging.Level.
        SEVERE, null, ex);
```

```
    } catch (InstantiationException ex) {
```

```
        java.util.logging.Logger.getLogger(AddItem.class.getName()).log(java.util.logging.Level.
            SEVERE, null, ex);
```

```
    } catch (IllegalAccessException ex) {
```

```
        java.util.logging.Logger.getLogger(AddItem.class.getName()).log(java.util.logging.Level.
            SEVERE, null, ex);
```



```
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

```
java.util.logging.Logger.getLogger(AddItem.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
```

```
    }
```

```
//</editor-fold>
```

```
/* Create and display the form */
```

```
java.awt.EventQueue.invokeLater(new Runnable() {
```

```
    public void run() {
```

```
//        new AddItem().setVisible(true);
```

```
        Login ln = new Login();
```

```
        ln.setVisible(true);
```

```
    }
```

```
});
```

```
}
```

```
// Variables declaration - do not modify
```

```
private javax.swing.ButtonGroup buttonGroup1;
```

```
private javax.swing.JButton jButton1;
```

```
private javax.swing.JButton jButton2;
```

```
private javax.swing.JButton jButton3;
```

```
private javax.swing.JButton jButton4;  
private javax.swing.JButton jButton5;  
private javax.swing.JButton jButton6;  
private javax.swing.JButton jButton7;  
private javax.swing.JComboBox<String> jComboBox1;  
private javax.swing.JComboBox<String> jComboBox2;  
private javax.swing.JLabel jLabel1;  
private javax.swing.JLabel jLabel10;  
private javax.swing.JLabel jLabel11;  
private javax.swing.JLabel jLabel12;  
private javax.swing.JLabel jLabel13;  
private javax.swing.JLabel jLabel14;  
private javax.swing.JLabel jLabel15;  
private javax.swing.JLabel jLabel2;  
private javax.swing.JLabel jLabel3;  
private javax.swing.JLabel jLabel4;  
private javax.swing.JLabel jLabel5;  
private javax.swing.JLabel jLabel6;  
private javax.swing.JLabel jLabel7;  
private javax.swing.JLabel jLabel8;  
private javax.swing.JLabel jLabel9;  
private javax.swing.JMenu jMenu1;  
private javax.swing.JMenu jMenu2;
```

```
private javax.swing.JMenu jMenu3;

private javax.swing.JMenuBar jMenuBar1;

private javax.swing.JMenuItem jMenuItem1;

private javax.swing.JMenuItem jMenuItem2;

private javax.swing.JMenuItem jMenuItem3;

private javax.swing.JMenuItem jMenuItem4;

private javax.swing.JPanel jPanel1;

private javax.swing.JPanel jPanel2;

private javax.swing.JRadioButton jRadioButton1;

private javax.swing.JRadioButton jRadioButton2;

private javax.swing.JRadioButton jRadioButton3;

private javax.swing.JScrollPane jScrollPane1;

private javax.swing.JSeparator jSeparator1;

private javax.swing.JTable jTable1;

private javax.swing.JTextField jTextField1;

private javax.swing.JTextField jTextField2;

private javax.swing.JTextField jTextField3;

private javax.swing.JTextField jTextField4;

private javax.swing.JTextField jTextField5;

// End of variables declaration

}
```

## **B) Admin.java**

```
/*
```

\* 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.

\*/

package JelledMartInformationSystem;

import java.util.ArrayList;

import java.util.Iterator;

/\*\*

\*

\* @author User

\*/

public class Admin extends javax.swing.JFrame {

/\*\*

\* Creates new form Admin

\*/

public static int count = 1;

public Admin() {

     initComponents();

}

```

/**
 * 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() {

    jPanel1 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jButton1 = new javax.swing.JButton();
    jButton4 = new javax.swing.JButton();
    jButton5 = new javax.swing.JButton();
    jButton6 = new javax.swing.JButton();
    jButton7 = new javax.swing.JButton();
    jButton3 = new javax.swing.JButton();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

    jLabel1.setFont(new java.awt.Font("Arial", 1, 24)); // NOI18N
    jLabel1.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);

```

```
jLabel1.setText("Admin");
```

```
jButton1.setText("Register Employee");
```

```
jButton1.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton1ActionPerformed(evt);  
    }  
});
```

```
jButton4.setText("Employee Info");
```

```
jButton4.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton4ActionPerformed(evt);  
    }  
});
```

```
jButton5.setText("Add Item");
```

```
jButton5.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton5ActionPerformed(evt);  
    }  
});
```

```
jButton6.setText("Edit Item");

jButton6.addActionListener(new java.awt.event.ActionListener() {

    public void actionPerformed(java.awt.event.ActionEvent evt) {

        jButton6ActionPerformed(evt);

    }

});
```

```
jButton7.setText("Log Out");

jButton7.addActionListener(new java.awt.event.ActionListener() {

    public void actionPerformed(java.awt.event.ActionEvent evt) {

        jButton7ActionPerformed(evt);

    }

});
```

```
jButton3.setText("Item Info");

jButton3.addActionListener(new java.awt.event.ActionListener() {

    public void actionPerformed(java.awt.event.ActionEvent evt) {

        jButton3ActionPerformed(evt);

    }

});
```

```
javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);

jPanel1.setLayout(jPanel1Layout);
```

```

jPanel1Layout.setHorizontalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

    .addGroup(jPanel1Layout.createSequentialGroup()

        .addGap(22, 22, 22)

        .addComponent(jButton5, javax.swing.GroupLayout.PREFERRED_SIZE,
121, javax.swing.GroupLayout.PREFERRED_SIZE)

        .addGap(33, 33, 33)

    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LE
ADING)

        .addGroup(jPanel1Layout.createSequentialGroup()

            .addComponent(jButton6, javax.swing.GroupLayout.DEFAULT_SIZE,
158, Short.MAX_VALUE)

            .addGap(35, 35, 35)

            .addComponent(jButton3,
javax.swing.GroupLayout.PREFERRED_SIZE, 116,
javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()

            .addGap(0, 0, Short.MAX_VALUE)

            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE,
117, javax.swing.GroupLayout.PREFERRED_SIZE)

            .addGap(179, 179, 179))))

    .addGroup(jPanel1Layout.createSequentialGroup()

```



```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jPanel1Layout.createSequentialGroup()
```

```
        .addGap(189, 189, 189)
```

```
        .addComponent(jButton7,
javax.swing.GroupLayout.PREFERRED_SIZE, 107,
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
    .addGroup(jPanel1Layout.createSequentialGroup()
```

```
        .addGap(58, 58, 58)
```

```
        .addComponent(jButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 154,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
        .addGap(75, 75, 75)
```

```
        .addComponent(jButton4,
javax.swing.GroupLayout.PREFERRED_SIZE, 116,
javax.swing.GroupLayout.PREFERRED_SIZE)))
```

```
    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
```

```
);
```

```
jPanel1Layout.setVerticalGroup(
```

```
jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jPanel1Layout.createSequentialGroup()
```

```
        .addContainerGap()
```

```
.addComponent(jLabel1)

.addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

    .addComponent(jButton1)

    .addComponent(jButton4))

.addGap(35, 35, 35)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

    .addComponent(jButton5)

    .addComponent(jButton6)

    .addComponent(jButton3))

.addGap(45, 45, 45)

.addComponent(jButton7)

.addContainerGap(94, Short.MAX_VALUE))

);

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();

    setLocationRelativeTo(null);
} // </editor-fold>

```

```

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

    RegisterEmployee rg = new RegisterEmployee();

    rg.setVisible(true);

    setVisible(false);

}

```

```

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

    EmployeeInfo ei = new EmployeeInfo();

```

```
        ei.setVisible(true);  
        setVisible(false);  
    }
```

```
private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
    AddItem ai = new AddItem();  
    ai.setVisible(true);  
    setVisible(false);  
}
```

```
private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
    EditItem edi = new EditItem();  
    edi.setVisible(true);  
    setVisible(false);  
}
```

```
private void jButton7ActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
    setVisible(false);  
    Login In = new Login();  
    In.setVisible(true);  
}
```

```
}
```

```
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
```

```
    // TODO add your handling code here:
```

```
    ItemInfo i = new ItemInfo();
```

```
    i.setVisible(true);
```

```
    setVisible(false);
```

```
}
```

```
/**
```

```
 * @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());
            break;
        }
    }

} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Admin.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);

    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Admin.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);

    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Admin.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);

    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Admin.class.getName()).log(java.util.logging.Level.S
EVERE, null, ex);

    }

//</editor-fold>

/* Create and display the form */

```

```
        java.awt.EventQueue.invokeLater(new Runnable() {  
            public void run() {  
  
                //      new Admin().setVisible(true);  
  
                Login ln = new Login();  
  
                ln.setVisible(true);  
  
            }  
        });  
  
    }  
  
    // Variables declaration - do not modify  
    private javax.swing.JButton jButton1;  
    private javax.swing.JButton jButton3;  
    private javax.swing.JButton jButton4;  
    private javax.swing.JButton jButton5;  
    private javax.swing.JButton jButton6;  
    private javax.swing.JButton jButton7;  
    private javax.swing.JLabel jLabel1;  
    private javax.swing.JPanel jPanel1;  
  
    // End of variables declaration  
}
```

**C) BillItem.java**

```

/*
 * 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.
 */

package JelledMartInformationSystem;

import static JelledMartInformationSystem.AddItem.item;
import java.util.ArrayList;
import javax.swing.JFrame;
import javax.swing.JOptionPane;

/**
 *
 * @author
 */
public class BillItem extends javax.swing.JFrame {

    public static ArrayList<BillingItemRecord> bRecord = new
    ArrayList<BillingItemRecord>();

    int itmID;

    String itemName;

```



```
int price;
```

```
int quantity;
```

```
int totalPrice;
```

```
String category;
```

```
/**
```

```
 * Creates new form billItem
```

```
 */
```

```
public BillItem() {
```

```
    initComponents();
```

```
}
```

```
/**
```

```
 * 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() {
```

```
    jLabel1 = new javax.swing.JLabel();
```

```
    jTextField1 = new javax.swing.JTextField();
```

```
jLabel2 = new javax.swing.JLabel();  
jTextField2 = new javax.swing.JTextField();  
jLabel3 = new javax.swing.JLabel();  
jTextField3 = new javax.swing.JTextField();  
jLabel4 = new javax.swing.JLabel();  
jTextField4 = new javax.swing.JTextField();  
jButton1 = new javax.swing.JButton();  
jButton2 = new javax.swing.JButton();  
jLabel5 = new javax.swing.JLabel();  
jTextField5 = new javax.swing.JTextField();  
jButton3 = new javax.swing.JButton();  
jLabel6 = new javax.swing.JLabel();  
jLabel7 = new javax.swing.JLabel();  
jTextField6 = new javax.swing.JTextField();  
  
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);  
  
jLabel1.setText("Item Id");  
  
jTextField1.addKeyListener(new java.awt.event.KeyAdapter() {  
    public void keyReleased(java.awt.event.KeyEvent evt) {  
        jTextField1KeyReleased(evt);  
    }  
})
```

```
});
```

```
jLabel2.setText("Item Name");
```

```
jTextField2.setEditable(false);
```

```
jLabel3.setText("Item Price");
```

```
jTextField3.setEditable(false);
```

```
jLabel4.setText("Item Quantity");
```

```
jTextField4.addKeyListener(new java.awt.event.KeyAdapter() {  
    public void keyReleased(java.awt.event.KeyEvent evt) {  
        jTextField4KeyReleased(evt);  
    }  
});
```

```
jButton1.setText("Add to cart");
```

```
jButton1.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton1ActionPerformed(evt);  
    }  
});
```

```
});
```

```
jButton2.setText("Next");
```

```
jButton2.addActionListener(new java.awt.event.ActionListener() {
```

```
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        jButton2ActionPerformed(evt);
```

```
    }
```

```
});
```

```
jLabel5.setText("Total Price");
```

```
jTextField5.setEditable(false);
```

```
jButton3.setText("Back");
```

```
jButton3.addActionListener(new java.awt.event.ActionListener() {
```

```
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        jButton3ActionPerformed(evt);
```

```
    }
```

```
});
```

```
jLabel6.setBackground(new java.awt.Color(51, 0, 204));
```

```
jLabel6.setFont(new java.awt.Font("Times New Roman", 1, 14)); // NOI18N
```

```
jLabel6.setForeground(new java.awt.Color(0, 0, 204));
```



```
.addGroup(layout.createSequentialGroup()  
    .addContainerGap()  
    .addComponent(jButton3)))  
.addGap(42, 42, 42)  
  
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,  
false)  
    .addComponent(jTextField2, javax.swing.GroupLayout.DEFAULT_SIZE,  
99, Short.MAX_VALUE)  
    .addComponent(jTextField3)  
    .addComponent(jTextField4,  
javax.swing.GroupLayout.Alignment.TRAILING)  
    .addComponent(jTextField5,  
javax.swing.GroupLayout.Alignment.TRAILING)  
    .addComponent(jTextField1)  
    .addComponent(jLabel6, javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)  
    .addComponent(jTextField6))  
.addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,  
Short.MAX_VALUE))  
.addGroup(javax.swing.GroupLayout.Alignment.TRAILING,  
layout.createSequentialGroup()  
    .addGap(0, 176, Short.MAX_VALUE)  
    .addComponent(jButton1)  
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addComponent(jButton2)

.addGap(29, 29, 29))

);

layout.setVerticalGroup(

    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(layout.createSequentialGroup()

            .addGap(6, 6, 6)

                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)

                    .addComponent(jButton3)

                        .addGroup(layout.createSequentialGroup()

                            .addGap(4, 4, 4)

                                .addComponent(jLabel6, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))))

                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

                                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                                    .addComponent(jLabel1)

                                        .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
```

```
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
    .addComponent(jLabel2)
```

```
    .addComponent(jTextField2,  
    javax.swing.GroupLayout.PREFERRED_SIZE,  
    javax.swing.GroupLayout.DEFAULT_SIZE,  
    javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
    .addGap(18, 18, 18)
```

```
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
    .addComponent(jLabel3)
```

```
    .addComponent(jTextField3,  
    javax.swing.GroupLayout.PREFERRED_SIZE,  
    javax.swing.GroupLayout.DEFAULT_SIZE,  
    javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
    .addGap(18, 18, 18)
```

```
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
    .addComponent(jLabel4)
```

```
    .addComponent(jTextField4,  
    javax.swing.GroupLayout.PREFERRED_SIZE,  
    javax.swing.GroupLayout.DEFAULT_SIZE,  
    javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
```



```
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

    .addComponent(jLabel7)

    .addComponent(jTextField6,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
10, Short.MAX_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

    .addComponent(jLabel5)

    .addComponent(jTextField5,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

    .addGap(5, 5, 5)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

    .addComponent(jButton1)

    .addComponent(jButton2))

    .addContainerGap()

);

pack();
```

```
        setLocationRelativeTo(null);  
    }// </editor-fold>  
  
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {  
        // TODO add your handling code here:  
  
        UpdateItem it = new UpdateItem();  
  
        it.setVisible(true);  
  
        setVisible(false);  
  
    }  
  
    private void jTextField1KeyReleased(java.awt.event.KeyEvent evt) {  
        // TODO add your handling code here:  
  
        try {  
  
            int itemID = Integer.parseInt(jTextField1.getText().toString());  
  
            for (ItemRecord ir : AddItem.item) {  
  
                if (ir.getItemID() == itemID) {  
  
                    itmID = ir.getItemID();  
  
                    itemName = ir.getItemName();  
  
                    jTextField2.setText(itemName);  
  
                    price = ir.getItemPrice();  
  
                    jTextField3.setText(Integer.toString(price));  
  
                }  
            }  
        }  
    }  
}
```

```

        category = ir.getItemCategory();

        jTextField6.setText(category);
    }

}

} catch (NumberFormatException nfe) {

}

}

```

```

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

    JFrame f;

    f = new JFrame();

    int a = JOptionPane.showConfirmDialog(f, "Are you sure?");

    if (a == JOptionPane.OK_OPTION) {

        BillingItemRecord bi = new BillingItemRecord(itmID, itemName, price, category,
quantity, totalPrice);

        bRecord.add(bi);

        jTextField1.setText("");

        jTextField2.setText("");

        jTextField3.setText("");

        jTextField3.setText("");
    }
}

```

```
        jTextField4.setText("");

        jTextField5.setText("");

        jTextField6.setText("");
    }

}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:

    if (bRecord.isEmpty() == false) {
        bRecord.clear();
    }

    Employee e = new Employee();

    e.setVisible(true);

    setVisible(false);
}

private void jTextField4KeyReleased(java.awt.event.KeyEvent evt) {
    // TODO add your handling code here:

    if (jTextField4.getText().isEmpty()) {
        jTextField5.setText("");
    } else {
```

```

    }

    try {

        quantity = Integer.parseInt(jTextField4.getText());

        for (ItemRecord i : AddItem.item) {

            if (quantity <= 0) {

                JOptionPane.showMessageDialog(rootPane, "Quantity cannot be less than
1");

                break;

            } else if (quantity > i.getItemQuantity()) {

                JOptionPane.showMessageDialog(rootPane, "Insufficient quantity for the
selected item");

                break;

            } else {

                totalPrice = price * quantity;

                jTextField5.setText(Integer.toString(totalPrice));

            }

        }

    } catch (NumberFormatException e) {

    }

}

/**

```

```

* @param args the command line arguments
*/

public static void main(String args[]) throws Exception {

    /* 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());

                break;

            }

        }

    } catch (ClassNotFoundException ex) {

        java.util.logging.Logger.getLogger(BillItem.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);

    } catch (InstantiationException ex) {

```

```
java.util.logging.Logger.getLogger(BillItem.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
```

```
    } catch (IllegalAccessException ex) {
```

```
java.util.logging.Logger.getLogger(BillItem.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
```

```
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

```
java.util.logging.Logger.getLogger(BillItem.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
```

```
    }
```

```
//</editor-fold>
```

```
//</editor-fold>
```

```
//</editor-fold>
```

```
//</editor-fold>
```

```
/* Create and display the form */
```

```
java.awt.EventQueue.invokeLater(new Runnable() {
```

```
    public void run() {
```

```
//        new BillItem().setVisible(true);
```

```
        Login In = new Login();
```

```
        In.setVisible(true);
```

```
    }
```

```
    });  
}  
  
// Variables declaration - do not modify  
  
private javax.swing.JButton jButton1;  
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.JLabel jLabel6;  
private javax.swing.JLabel jLabel7;  
private javax.swing.JTextField jTextField1;  
private javax.swing.JTextField jTextField2;  
private javax.swing.JTextField jTextField3;  
private javax.swing.JTextField jTextField4;  
private javax.swing.JTextField jTextField5;  
private javax.swing.JTextField jTextField6;  
  
// End of variables declaration  
  
}
```



**D) BillingItemRecord.java**

```

/*
 * 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.
 */
package JelledMartInformationSystem;

/**
 *
 * @author User
 */
public class BillingItemRecord {
    private int itemID;
    private String itemName;
    private int itemPrice;
    private int itemQuantity;
    private int totalPrice;
    private String category;

    public BillingItemRecord(int itemID, String itemName, int itemPrice, String
category, int itemQuantity, int totalPrice ){
        this.itemID=itemID;
        this.itemName=itemName;
        this.itemPrice=itemPrice;
        this.itemQuantity=itemQuantity;
        this.category=category;
        this.totalPrice=totalPrice;
    }

    public int getItemID(){

```

```
        return itemID;
    }

    public void setItemID(int itemID){
        this.itemID=itemID;
    }

    public String getItemName(){
        return itemName;
    }

    public void setItemName(String itemName){
        this.itemName=itemName;
    }

    public int getItemPrice(){
        return itemPrice;
    }

    public void setItemPrice(int itemPrice){
        this.itemPrice=itemPrice;
    }

    public int getItemQuantity(){
        return itemQuantity;
    }

    public void setItemQuantity(int itemQuantity){
        this.itemQuantity=itemQuantity;
    }
```

```

    public String getCategory(){
        return category;
    }

```

```

    public void setCategory(String category){
        this.category=category;
    }

```

```

    public int getTotalPrice(){
        return totalPrice;
    }

```

```

    public void setTotalPrice(int totalPrice){
        this.totalPrice=totalPrice;
    }
}

```

### E) ChangePasswordEmployee.java

```

/*
 * 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.
 */
package JelledMartInformationSystem;

import javax.swing.JOptionPane;

/**
 *
 * @author User
 */

```

```

public class ChangePasswordEmployee extends javax.swing.JFrame {

    /**
     * Creates new form ChangePasswordEmployee
     */
    public ChangePasswordEmployee() {
        initComponents();
    }

    /**
     * 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() {

        jPanel2 = new javax.swing.JPanel();
        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jTextField1 = new javax.swing.JTextField();
        jTextField2 = new javax.swing.JTextField();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        jLabel7 = new javax.swing.JLabel();
        jButton3 = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

```

```
jLabel1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jLabel1.setText("Old Pasword");
```

```
jLabel2.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jLabel2.setText("New Password");
```

```
jButton1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jButton1.setText("Update Password");  
jButton1.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton1ActionPerformed(evt);  
    }  
});
```

```
jButton2.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jButton2.setText("Back");  
jButton2.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton2ActionPerformed(evt);  
    }  
});
```

```
jLabel7.setFont(new java.awt.Font("Arial", 1, 24)); // NOI18N  
jLabel7.setText("Change Password");
```

```
jButton3.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jButton3.setText("Clear");
```

```
javax.swing.GroupLayout jPanel2Layout = new  
javax.swing.GroupLayout(jPanel2);  
jPanel2.setLayout(jPanel2Layout);
```

```

jPanel2Layout.setHorizontalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

    .addGroup(jPanel2Layout.createSequentialGroup())

    .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jPanel2Layout.createSequentialGroup())

        .addGap(90, 90, 90)

    .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jPanel2Layout.createSequentialGroup())

    .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addComponent(jLabel1)
        .addComponent(jLabel2))
        .addGap(34, 34, 34)

    .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

        .addComponent(jTextField2,
javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, 179, Short.MAX_VALUE)
        .addComponent(jTextField1)))
        .addComponent(jLabel7)))
    .addGroup(jPanel2Layout.createSequentialGroup())
        .addContainerGap()
        .addComponent(jButton2)))

```

```

        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        .addGroup(jPanel2Layout.createSequentialGroup())
        .addGap(52, 52, 52)
        .addComponent(jButton1)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jButton3)
        .addGap(52, 52, 52))
    );
    jPanel2Layout.setVerticalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
G)
        .addGroup(jPanel2Layout.createSequentialGroup())
        .addContainerGap()
        .addComponent(jLabel7)
        .addGap(7, 7, 7)
        .addComponent(jButton2)
        .addGap(2, 2, 2)

        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.BASELINE)
        .addComponent(jLabel1)
        .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(37, 37, 37)

```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
    .addComponent(jLabel2)
```

```
    .addComponent(jTextField2,
        javax.swing.GroupLayout.PREFERRED_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE,
        javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
    .addGap(64, 64, 64)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```
    .addComponent(jButton1)
```

```
    .addComponent(jButton3))
```

```
    .addContainerGap(65, Short.MAX_VALUE))
```

```
);
```

```
    javax.swing.GroupLayout layout = new
        javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
```

```
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
            .addGroup(layout.createSequentialGroup()
```

```
                .addContainerGap()
```

```
                .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
                    javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
```

```
                .addContainerGap())
```

```
            );
```

```
        layout.setVerticalGroup(
```



```

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );

```

```

pack();
setLocationRelativeTo(null);
} // </editor-fold>

```

```

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    for(int i=0;i<RegisterEmployee.employee.size();i++){
        for(EmployeeRecord er: RegisterEmployee.employee){
            String oldPassword = jTextField1.getText();
            String newPassword = jTextField2.getText();
            if(er.getName().equals(Login.query)){
                if(oldPassword.equals(er.getPassword())){
                    er.setPassword(newPassword);
                    JOptionPane.showMessageDialog(rootPane, "Password Updated");
                }
                //      System.out.println(er.getName()+er.getEmail()+
er.getPassword()+er.getPhoneNumber()+er.getGender()+er.getCountry());
            }else{
                JOptionPane.showMessageDialog(rootPane, "Old Password does not
match, please enter correct password");
            }
        }
    }
}
}

```

```

    }

    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        Employee em = new Employee();
        em.setVisible(true);
        setVisible(false);
    }

    /**
     * @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());
                    break;
                }
            }
        }
    }

```

```

        } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(ChangePasswordEmployee.class.getName()).
log(java.util.logging.Level.SEVERE, null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(ChangePasswordEmployee.class.getName()).
log(java.util.logging.Level.SEVERE, null, ex);
        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(ChangePasswordEmployee.class.getName()).
log(java.util.logging.Level.SEVERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(ChangePasswordEmployee.class.getName()).
log(java.util.logging.Level.SEVERE, null, ex);
    }
    //</editor-fold>

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

// Variables declaration - do not modify
private javax.swing.JButton jButton1;

```

```

    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton3;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel7;
    private javax.swing.JPanel jPanel2;
    private javax.swing.JTextField jTextField1;
    private javax.swing.JTextField jTextField2;
    // End of variables declaration
}

```

## F) EditItem.java

```

/*
 * 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.
 */
package JelledMartInformationSystem;

import javax.swing.JFrame;
import javax.swing.JOptionPane;

/**
 *
 * @author User
 */
public class EditItem extends javax.swing.JFrame {

    int itmID;

```

```

String itemName;
int price;
int quantity;
int totalPrice;
String category;
String itemPriceRange;

/**
 * Creates new form EditItem
 */
public EditItem() {
    initComponents();
}

/**
 * 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() {

    jLabel8 = new javax.swing.JLabel();
    buttonGroup1 = new javax.swing.ButtonGroup();
    jPanel2 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();

```

```
jTextField1 = new javax.swing.JTextField();
jTextField2 = new javax.swing.JTextField();
jTextField3 = new javax.swing.JTextField();
jComboBox1 = new javax.swing.JComboBox<>();
jButton1 = new javax.swing.JButton();
jButton2 = new javax.swing.JButton();
jLabel7 = new javax.swing.JLabel();
jTextField4 = new javax.swing.JTextField();
jLabel6 = new javax.swing.JLabel();
jLabel9 = new javax.swing.JLabel();
jLabel10 = new javax.swing.JLabel();
jLabel11 = new javax.swing.JLabel();
jLabel12 = new javax.swing.JLabel();
jLabel13 = new javax.swing.JLabel();
jLabel14 = new javax.swing.JLabel();
jRadioButton1 = new javax.swing.JRadioButton();
jRadioButton2 = new javax.swing.JRadioButton();
jRadioButton3 = new javax.swing.JRadioButton();
jButton3 = new javax.swing.JButton();

jLabel8.setBackground(new java.awt.Color(255, 0, 0));
jLabel8.setForeground(new java.awt.Color(255, 0, 51));
```

```
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
```

```
jLabel1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jLabel1.setText("Item ID");
```

```
jLabel2.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jLabel2.setText("Item Name");
```

```
jLabel3.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jLabel3.setText("Item Price");
```

```
jLabel4.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jLabel4.setText("Item Category");
```

```
jLabel5.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jLabel5.setText("Item Quantity");
```

```
jTextField1.addKeyListener(new java.awt.event.KeyAdapter() {  
    public void keyReleased(java.awt.event.KeyEvent evt) {  
        jTextField1KeyReleased(evt);  
    }  
});
```

```
jComboBox1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jComboBox1.setModel(new javax.swing.DefaultComboBoxModel<>(new  
String[] { "SELECT ITEM CATEGORY", "Fruits", "Chocolates", "Dry Fruit",  
"Vegetable", "Dairy Products" }));
```

```
jButton1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jButton1.setText("Update Item");  
jButton1.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton1ActionPerformed(evt);  
    }  
});
```

```
jButton2.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jButton2.setText("Back");
```

```

jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

```

```

jLabel7.setFont(new java.awt.Font("Arial", 1, 24)); // NOI18N
jLabel7.setText("Edit Item");

```

```

jLabel6.setBackground(new java.awt.Color(255, 0, 0));
jLabel6.setFont(new java.awt.Font("Times New Roman", 1, 14)); // NOI18N
jLabel6.setForeground(new java.awt.Color(255, 0, 51));

```

```

jLabel9.setBackground(new java.awt.Color(255, 0, 0));
jLabel9.setFont(new java.awt.Font("Times New Roman", 1, 14)); // NOI18N
jLabel9.setForeground(new java.awt.Color(255, 0, 51));

```

```

jLabel10.setBackground(new java.awt.Color(255, 0, 0));
jLabel10.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
NOI18N
jLabel10.setForeground(new java.awt.Color(255, 0, 51));

```

```

jLabel11.setBackground(new java.awt.Color(255, 0, 0));
jLabel11.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
NOI18N
jLabel11.setForeground(new java.awt.Color(255, 0, 51));

```

```

jLabel12.setBackground(new java.awt.Color(255, 0, 0));
jLabel12.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
NOI18N
jLabel12.setForeground(new java.awt.Color(255, 0, 51));

```



```

jLabel13.setBackground(new java.awt.Color(0, 0, 204));
jLabel13.setFont(new java.awt.Font("Times New Roman", 1, 18)); //
NOI18N
jLabel13.setForeground(new java.awt.Color(51, 0, 204));

jLabel14.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jLabel14.setText("Price Range");

buttonGroup1.add(jRadioButton1);
jRadioButton1.setText("Low");

buttonGroup1.add(jRadioButton2);
jRadioButton2.setText("Medium");

buttonGroup1.add(jRadioButton3);
jRadioButton3.setText("High");

jButton3.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jButton3.setText("Clear");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel2Layout = new
javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(

```

```

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup()
    .addGap(184, 184, 184)
    .addComponent(jLabel11, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addContainerGap())
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup()
    .addContainerGap()
    .addComponent(jLabel13, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    .addGap(253, 253, 253))
    .addGroup(jPanel2Layout.createSequentialGroup()

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel2Layout.createSequentialGroup()

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel2Layout.createSequentialGroup()
        .addGap(90, 90, 90)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(jLabel1)
    .addComponent(jLabel2)
    .addComponent(jLabel3))

```

```

        .addGap(34, 34, 34))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup())
        .addContainerGap()

        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)

        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup())

        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)

                .addComponent(jLabel14)
                .addComponent(jLabel5))
                .addGap(22, 22, 22))

        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup())
                .addComponent(jLabel4)
                .addGap(18, 18, 18))))

        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)

                .addComponent(jComboBox1,
javax.swing.GroupLayout.PREFERRED_SIZE, 185,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.TRAILING, false)

```

```
        .addComponent(jLabel6,  
javax.swing.GroupLayout.Alignment.LEADING,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)  
        .addComponent(jTextField3,  
javax.swing.GroupLayout.Alignment.LEADING,  
javax.swing.GroupLayout.DEFAULT_SIZE, 179, Short.MAX_VALUE)  
        .addComponent(jTextField2)  
        .addComponent(jTextField1,  
javax.swing.GroupLayout.Alignment.LEADING)  
        .addComponent(jLabel9,  
javax.swing.GroupLayout.Alignment.LEADING,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)  
        .addComponent(jLabel10,  
javax.swing.GroupLayout.Alignment.LEADING,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))  
    .addGroup(jPanel2Layout.createSequentialGroup())  
    .addComponent(jRadioButton1)  
  
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)  
    .addComponent(jRadioButton2)  
  
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)  
    .addComponent(jRadioButton3)  
  
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
    .addComponent(jLabel12,  
javax.swing.GroupLayout.PREFERRED_SIZE, 168,  
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```

        .addComponent(jTextField4,
javax.swing.GroupLayout.PREFERRED_SIZE, 187,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addComponent(jButton2)
            .addGap(95, 95, 95)
            .addComponent(jLabel7))
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(77, 77, 77)
            .addComponent(jButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 124,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(62, 62, 62)
            .addComponent(jButton3)))
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );
    jPanel2Layout.setVerticalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(7, 7, 7)

        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel7)
            .addComponent(jButton2))

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

```

```
.addComponent(jLabel6,  
javax.swing.GroupLayout.PREFERRED_SIZE, 19,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
  
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignm  
ent.BASELINE)  
    .addComponent(jLabel1)  
    .addComponent(jTextField1,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
    .addGap(12, 12, 12)  
    .addComponent(jLabel9,  
javax.swing.GroupLayout.PREFERRED_SIZE, 19,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
  
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignm  
ent.BASELINE)  
    .addComponent(jLabel2)  
    .addComponent(jTextField2,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addComponent(jLabel10,  
javax.swing.GroupLayout.PREFERRED_SIZE, 19,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
  
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignm  
ent.BASELINE)  
    .addComponent(jLabel3)  
    .addComponent(jTextField3,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
    .addComponent(jLabel11,  
javax.swing.GroupLayout.PREFERRED_SIZE, 19,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
    .addGap(1, 1, 1)  
  
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignm  
ent.BASELINE)  
    .addComponent(jComboBox1,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
    .addComponent(jLabel4,  
javax.swing.GroupLayout.PREFERRED_SIZE, 23,  
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel2Layout.createSequentialGroup()
        .addGap(13, 13, 13)
        .addComponent(jLabel12,
javax.swing.GroupLayout.PREFERRED_SIZE, 19,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup()

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
22, Short.MAX_VALUE)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(jRadioButton1)
    .addComponent(jRadioButton2)
    .addComponent(jRadioButton3)
    .addComponent(jLabel14))))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
21, Short.MAX_VALUE)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(jLabel5)
    .addComponent(jTextField4,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

```



```

        .addGap(18, 18, 18)
        .addComponent(jLabel13,
javax.swing.GroupLayout.PREFERRED_SIZE, 19,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.BASELINE)
            .addComponent(jButton1)
            .addComponent(jButton3))
        .addContainerGap(45, Short.MAX_VALUE))
    );

    javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
            .addComponent(jPanel2,
javax.swing.GroupLayout.PREFERRED_SIZE, 426,
javax.swing.GroupLayout.PREFERRED_SIZE))
        );
    layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

```

```

        .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );

    pack();
    setLocationRelativeTo(null);
} // </editor-fold>

static boolean isNumber(String s) {
    for (int i = 0; i < s.length(); i++) {
        if (Character.isDigit(s.charAt(i)) == false) {
            return false;
        }
    }

    return true;
}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try{
        String itemName = jTextField2.getText();
        String itemCategory = jComboBox1.getSelectedItem().toString();
        String priceRange = "";

        if (jRadioButton1.isSelected()) {
            priceRange = priceRange + jRadioButton1.getText().trim();
        }
        if (jRadioButton2.isSelected()) {
            priceRange = priceRange + jRadioButton2.getText().trim();
        }
        if (jRadioButton3.isSelected()) {
            priceRange = priceRange + jRadioButton3.getText().trim();
        }
    }
}

```

```

    }

    if (isNumber(jTextField1.getText().trim()) == false) {
        JOptionPane.showMessageDialog(rootPane, "Error", "Please Enter
Integer Value in ID", JOptionPane.WARNING_MESSAGE);
    } else if (jTextField1.getText().toLowerCase().trim().isEmpty() == true) {
        JOptionPane.showMessageDialog(rootPane, "Error", "Can't Leave Empty
in ID", JOptionPane.WARNING_MESSAGE);
    } //Item Name Validation
    else if (itemName.isEmpty() == true) {
        JOptionPane.showMessageDialog(rootPane, "Error", "Can't Leave Empty
in Name", JOptionPane.WARNING_MESSAGE);
    } else if (itemName.matches(".*\\d.*")) {
        JOptionPane.showMessageDialog(rootPane, "Only Text Value can be
entered in item Name", "Error", JOptionPane.ERROR_MESSAGE);
    } else if (isNumber(jTextField3.getText().trim()) == false) {
        JOptionPane.showMessageDialog(rootPane, "Error", "Please Enter
Integer Value in Price", JOptionPane.WARNING_MESSAGE);
    } else if (jTextField3.getText().toLowerCase().trim().isEmpty() == true) {
        JOptionPane.showMessageDialog(rootPane, "Error", "Can't Leave Empty
in Price", JOptionPane.WARNING_MESSAGE);
    } else if (itemCategory == "SELECT CATEGORY") {
        JOptionPane.showMessageDialog(rootPane, "Error", "Can't Leave Empty
in Item Category", JOptionPane.WARNING_MESSAGE);
    } else if (isNumber(jTextField4.getText().trim()) == false) {
        JOptionPane.showMessageDialog(rootPane, "Error", "Please Enter
Integer Value in Quantity", JOptionPane.WARNING_MESSAGE);
    } else if (jTextField4.getText().toLowerCase().trim().isEmpty() == true) {
        JOptionPane.showMessageDialog(rootPane, "Error", "Can't Leave Empty
in Item Quantity", JOptionPane.WARNING_MESSAGE);
    } else if (priceRange == "") {

```

```

        JOptionPane.showMessageDialog(rootPane, "Error", "Can't Leave Empty
in Price Range", JOptionPane.WARNING_MESSAGE);
    } else {
        for (int i = 0; i < AddItem.item.size(); i++) {
            for (ItemRecord it : AddItem.item) {
                int itemId = Integer.parseInt(jTextField1.getText());
                int itemPrice = Integer.parseInt(jTextField3.getText());
                int itemQuantity = Integer.parseInt(jTextField4.getText());
                int idItem = it.getItemId();
                if (idItem == itemId) {
                    it.setItemId(itemId);
                    it.setItemName(itName);
                    it.setItemPrice(itemPrice);
                    it.setItemCategory(itemCategory);
                    it.setPriceRange(priceRange);
                    it.setItemQuantity(itemQuantity);

                    JOptionPane.showMessageDialog(rootPane, "Item Updated!");
                    jTextField1.setText("");
                    jTextField2.setText("");
                    jTextField3.setText("");
                    jTextField4.setText("");
                    jComboBox1.setSelectedIndex(0);
                    buttonGroup1.clearSelection();
                }
            }
        }
    }
}
} catch (NumberFormatException nfe){
}

```

```
}
```

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    setVisible(false);
    Admin ad = new Admin();
    ad.setVisible(true);
}
```

```
private void jTextField1KeyReleased(java.awt.event.KeyEvent evt) {
    // TODO add your handling code here:
    try{
        int itemID = Integer.parseInt(jTextField1.getText().toString());
        for (ItemRecord ir : AddItem.item) {
            if (ir.getItemID() == itemID) {
                itmID = ir.getItemID();
                itemName = ir.getItemName();
                jTextField2.setText(itemName);
                price = ir.getItemPrice();
                jTextField3.setText(Integer.toString(price));
                category = ir.getItemCategory();
                jComboBox1.setSelectedItem(category);
                itemPriceRange = ir.getPriceRange();
                if (itemPriceRange.equals("Low")) {
                    jRadioButton1.setSelected(rootPaneCheckingEnabled);
                }
                if (itemPriceRange.equals("Medium")) {
                    jRadioButton2.setSelected(rootPaneCheckingEnabled);
                }
                if (itemPriceRange.equals("High")) {
                    jRadioButton3.setSelected(rootPaneCheckingEnabled);
                }
            }
        }
    }
}
```

```

        }
        quantity = ir.getItemQuantity();
        jTextField4.setText(Integer.toString(quantity));
    }
}
} catch (NumberFormatException nfe){
    jTextField1.setText("");
    jTextField2.setText("");
    jTextField3.setText("");
    jTextField4.setText("");
    jComboBox1.setSelectedIndex(0);
    buttonGroup1.clearSelection();
}
}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    jTextField1.setText("");
    jTextField2.setText("");
    jTextField3.setText("");
    jTextField4.setText("");
    jComboBox1.setSelectedIndex(0);
    buttonGroup1.clearSelection();
}

/**
 * @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());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(EditItem.class.getName()).log(java.util.logging
.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(EditItem.class.getName()).log(java.util.logging
.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(EditItem.class.getName()).log(java.util.logging
.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(EditItem.class.getName()).log(java.util.logging
.Level.SEVERE, null, ex);

```

```

    }
    //</editor-fold>

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

// Variables declaration - do not modify
private javax.swing.ButtonGroup buttonGroup1;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JButton jButton3;
private javax.swing.JComboBox<String> jComboBox1;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel11;
private javax.swing.JLabel jLabel12;
private javax.swing.JLabel jLabel13;
private javax.swing.JLabel jLabel14;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;

```



```

private javax.swing.JLabel jLabel8;
private javax.swing.JLabel jLabel9;
private javax.swing.JPanel jPanel2;
private javax.swing.JRadioButton jRadioButton1;
private javax.swing.JRadioButton jRadioButton2;
private javax.swing.JRadioButton jRadioButton3;
private javax.swing.JTextField jTextField1;
private javax.swing.JTextField jTextField2;
private javax.swing.JTextField jTextField3;
private javax.swing.JTextField jTextField4;
// End of variables declaration
}

```

### G) Employee.java

```

/*
 * 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.
 */
package JelledMartInformationSystem;

/**
 *
 * @author User
 */
public class Employee extends javax.swing.JFrame {

    /**
     * Creates new form Employee
     */
    public Employee() {

```

```

        initComponents();
        jLabel1.setText("Welcome, " + Login.query.toUpperCase());
    }

    /**
     * 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() {

        jPanel2 = new javax.swing.JPanel();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        jLabel7 = new javax.swing.JLabel();
        jButton3 = new javax.swing.JButton();
        jButton4 = new javax.swing.JButton();
        jLabel1 = new javax.swing.JLabel();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        jButton1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
        jButton1.setText("Bill Item");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });
    }

```

```
jButton2.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jButton2.setText("My Profile");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});
```

```
jLabel7.setFont(new java.awt.Font("Arial", 1, 24)); // NOI18N
jLabel7.setText("Employee");
```

```
jButton3.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jButton3.setText("Log Out");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});
```

```
jButton4.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jButton4.setText("Change Password");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});
```

```
jLabel1.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jLabel1.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
```

```

        javax.swing.GroupLayout jPanel2Layout = new
javax.swing.GroupLayout(jPanel2);
        jPanel2.setLayout(jPanel2Layout);
        jPanel2Layout.setHorizontalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jPanel2Layout.createSequentialGroup()

            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                .addGroup(jPanel2Layout.createSequentialGroup()

                    .addGroup(jPanel2Layout.createSequentialGroup()

                        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                            .addGroup(jPanel2Layout.createSequentialGroup()

                                .addGroup(jPanel2Layout.createSequentialGroup()

                                    .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                                        .addGroup(jPanel2Layout.createSequentialGroup()

                                            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                                                .addGroup(jPanel2Layout.createSequentialGroup()

                                                    .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                                                        .addGroup(jPanel2Layout.createSequentialGroup()

                                                            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                                                                .addGroup(jPanel2Layout.createSequentialGroup()

                                                                    .addComponent(jButton4,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                                                                    .addComponent(jButton2,
javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                                                                    .addComponent(jButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 213,
javax.swing.GroupLayout.PREFERRED_SIZE)

                                                                    .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                                                                        .addGroup(jPanel2Layout.createSequentialGroup()

                                                                            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                                                                                .addGroup(jPanel2Layout.createSequentialGroup()

                                                                                    .addGap(38, 38, 38)

```

```

        .addComponent(jButton3,
javax.swing.GroupLayout.PREFERRED_SIZE, 135,
javax.swing.GroupLayout.PREFERRED_SIZE))))
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(101, 101, 101)
            .addComponent(jLabel1,
javax.swing.GroupLayout.PREFERRED_SIZE, 194,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addGap(142, 142, 142)
                .addComponent(jLabel7)))
        .addContainerGap(112, Short.MAX_VALUE))
    );
jPanel2Layout.setVerticalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

    .addGroup(jPanel2Layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jLabel7)
        .addGap(18, 18, 18)
        .addComponent(jLabel1,
javax.swing.GroupLayout.PREFERRED_SIZE, 21,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
37, Short.MAX_VALUE)
            .addComponent(jButton2)
            .addGap(18, 18, 18)
            .addComponent(jButton4)
            .addGap(18, 18, 18)

```

```

        .addComponent(jButton1)
        .addGap(18, 18, 18)
        .addComponent(jButton3)
        .addGap(39, 39, 39))
    );

    javax.swing.GroupLayout layout = new
    javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(

    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jPanel2, javax.swing.GroupLayout.Alignment.TRAILING,
    javax.swing.GroupLayout.DEFAULT_SIZE,
    javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
    layout.setVerticalGroup(

    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
    javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );

    pack();
    setLocationRelativeTo(null);
} // </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    BillItem bi = new BillItem();
    bi.setVisible(true);

```

```

        setVisible(false);
    }

    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        MyProfile mp = new MyProfile();
        mp.setVisible(true);
        setVisible(false);
    }

    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        ChangePasswordEmployee cpe = new ChangePasswordEmployee();
        cpe.setVisible(true);
        setVisible(false);
    }

    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        setVisible(false);
        Login ln = new Login();
        ln.setVisible(true);
    }

    /**
     * @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());

break;

}

}

} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Employee.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Employee.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Employee.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Employee.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

}

//</editor-fold>



```

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

    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton3;
    private javax.swing.JButton jButton4;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel7;
    private javax.swing.JPanel jPanel2;
    // End of variables declaration
}

```

## H) EmployeeInfo.java

```

/*
 * 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.
 */
package JelledMartInformationSystem;

import java.util.ArrayList;

```

```

import java.util.Arrays;
import javax.swing.JOptionPane;
import javax.swing.RowFilter;
import javax.swing.table.DefaultTableModel;
import javax.swing.table.TableRowSorter;

/**
 *
 * @author User
 */
public class EmployeeInfo extends javax.swing.JFrame {

    DefaultTableModel dtm;
    String[] eName;

    /**
     * Creates new form EmployeeInfo
     */
    public EmployeeInfo() {
        initComponents();
    }

    /**
     * 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() {

        jLabel1 = new javax.swing.JLabel();

```

```

jButton1 = new javax.swing.JButton();
jScrollPane1 = new javax.swing.JScrollPane();
jTable1 = new javax.swing.JTable();
jTextField1 = new javax.swing.JTextField();
jButton2 = new javax.swing.JButton();
jButton3 = new javax.swing.JButton();

```

```

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
addWindowListener(new java.awt.event.WindowAdapter() {
    public void windowOpened(java.awt.event.WindowEvent evt) {
        formWindowOpened(evt);
    }
});

```

```

jLabel1.setFont(new java.awt.Font("Arial", 1, 24)); // NOI18N
jLabel1.setText("Employee Info");

```

```

jButton1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jButton1.setText("Back");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

```

```

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

    },
    new String [] {

```

```

        "Name", "Password", "Email", "Phone Number", "Gender", "Country"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});

jTable1.getTableHeader().setReorderingAllowed(false);
jScrollPane1.setViewportView(jTable1);
if (jTable1.getColumnModel().getColumnCount() > 0) {
    jTable1.getColumnModel().getColumn(0).setResizable(false);
    jTable1.getColumnModel().getColumn(1).setResizable(false);
    jTable1.getColumnModel().getColumn(2).setResizable(false);
    jTable1.getColumnModel().getColumn(3).setResizable(false);
    jTable1.getColumnModel().getColumn(4).setResizable(false);
    jTable1.getColumnModel().getColumn(5).setResizable(false);
}

jTextField1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jTextField1KeyReleased(evt);
    }
});

jButton2.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
jButton2.setText("Sort by name");
jButton2.addActionListener(new java.awt.event.ActionListener() {

```

```
public void actionPerformed(java.awt.event.ActionEvent evt) {  
    jButton2ActionPerformed(evt);  
}  
});  
  
jButton3.setText("Search");  
jButton3.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton3ActionPerformed(evt);  
    }  
});  
  
javax.swing.GroupLayout layout = new  
javax.swing.GroupLayout(getContentPane());  
getContentPane().setLayout(layout);  
layout.setHorizontalGroup(  
layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
    .addGroup(layout.createSequentialGroup()  
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)  
            .addGroup(layout.createSequentialGroup()  
                .add(jLabel1)  
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
                .add(jButton3)  
            )  
            .addGroup(layout.createSequentialGroup()  
                .add(jTextField1)  
                .addGap(72, 72, 72)  
                .add(jButton2)  
            )  
        ), javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)  
    .addContainerGap())  
);
```

```

        .addGroup(layout.createSequentialGroup())
        .addGap(103, 103, 103)
        .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE, 88,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jButton3,
javax.swing.GroupLayout.PREFERRED_SIZE, 73,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jButton2)
        .addGap(9, 9, 9)))
        .addGroup(layout.createSequentialGroup())
        .addGap(26, 26, 26)
        .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 436,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addContainerGap(21, Short.MAX_VALUE))
    );
    layout.setVerticalGroup(

    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup())
        .addContainerGap()
        .addComponent(jLabel1)
        .addGap(18, 18, 18)

```

```

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BAS
ELINE)
        .addComponent(jButton1)
        .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jButton2)
        .addComponent(jButton3))
.addGap(18, 18, 18)
.addComponent(jScrollPane1,
javax.swing.GroupLayout.DEFAULT_SIZE, 285, Short.MAX_VALUE))
);

pack();
setLocationRelativeTo(null);
} // </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    setVisible(false);
    Admin ad = new Admin();
    ad.setVisible(true);
}

private void formWindowOpened(java.awt.event.WindowEvent evt) {
    // TODO add your handling code here
    addT();
}

```

```

public void addT(){
    dtm = (DefaultTableModel) jTable1.getModel();

    for (EmployeeRecord emm2 : RegisterEmployee.employee) {
        String name = emm2.getName();
        String email = emm2.getEmail();
        String password = emm2.getPassword();
        long number = emm2.getPhoneNumber();
        String gender = emm2.getGender();
        String country = emm2.getCountry();

        Object[] o = {name, password, email, number, gender, country};
        dtm.addRow(o);
    }
}

private void table(String search) {
    dtm = (DefaultTableModel) jTable1.getModel();
    TableRowSorter<DefaultTableModel> tr = new
TableRowSorter<DefaultTableModel>(dtm);
    jTable1.setRowSorter(tr);
    tr.setRowFilter(RowFilter.regexFilter(search));

}

private void columnArr(){
    int rowCount = jTable1.getRowCount();
    eName = new String[rowCount];

```



```

if (rowCount != 0) {
    for (int i = 0; i < rowCount; i++) {
        String name = jTable1.getValueAt(i, 0).toString();
        eName[i] = name;
    }
}
}

```

```

private void selectionSort(){
    // Selection Sort
    if (eName.length != 0) {
        int min;
        String temp = "";

        for (int i = 0; i < eName.length; i++) {
            dtm.setRowCount(0);
            min = i;
            for (int j = i + 1; j < eName.length; j++) {
                if (eName[j].compareTo(eName[min]) < 0) {
                    min = j;
                }
            }

            temp = eName[i];
            eName[i] = eName[min];
            eName[min] = temp;
        }

        for(int z=0;z<eName.length;z++){
            for(EmployeeRecord em : RegisterEmployee.employee){

```

```

        String name = em.getName().toLowerCase();
        if(name.equals(eName[z])){
            Object[] o =
{em.getName(),em.getPassword(),em.getEmail(),em.getPhoneNumber(),em.get
Gender(),em.getCountry()};
            dtm.addRow(o);
        }
    }
    //      System.out.println(eName[z]);
}
}
}

```

```

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:

    columnArr();

    selectionSort();

}

```

```

private void jTextField1KeyReleased(java.awt.event.KeyEvent evt) {
    // TODO add your handling code here:

    // Binary Search
    String empName = jTextField1.getText().toLowerCase();
    System.out.println(empName.isBlank());
    if(empName.isBlank() == true){
        dtm.setRowCount(0);
    }
}

```

```

        addT();
        table(empName);
    }
}

```

```

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:

```

```

        columnArr();

```

```

        selectionSort();

```

```

//Binary Search

```

```

String empName = jTextField1.getText().toLowerCase();

```

```

if(empName.isBlank() == false){
    int li = 0;
    int hi = eName.length - 1;
    int mi = (li + hi) / 2;
    while (li <= hi) {
        if (eName[mi].compareTo(empName) == 0) {
            table(empName);
            break;
        } else if (eName[mi].compareTo(empName) < 0) {
            li = mi + 1;
        } else {
            hi = mi - 1;
        }

        mi = (li + hi) / 2;
    }
}

```

```

        if (li > hi) {
            System.out.println("element not found");
        }
    }
    else{
        JOptionPane.showMessageDialog(rootPane, "Enter name please",
"Error", JOptionPane.ERROR_MESSAGE);
        table(empName);
    }

}

/**
 * @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());
                break;
            }
        }
    }
    catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(Main.class).log(java.util.logging.Level.SEVERE,
"Could not load a UI implementation.", ex);
    }
    catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(Main.class).log(java.util.logging.Level.SEVERE,
"Could not instantiate a_UI.", ex);
    }
    catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(Main.class).log(java.util.logging.Level.SEVERE,
"Could not access a UI class.", ex);
    }
    finally {
        new Main().setVisible(true);
    }
}

```

```

        }
    }
} catch (ClassNotFoundException ex) {

    java.util.logging.Logger.getLogger(EmployeeInfo.class.getName()).log(java.util.lo
gging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {

    java.util.logging.Logger.getLogger(EmployeeInfo.class.getName()).log(java.util.lo
gging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {

    java.util.logging.Logger.getLogger(EmployeeInfo.class.getName()).log(java.util.lo
gging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

    java.util.logging.Logger.getLogger(EmployeeInfo.class.getName()).log(java.util.lo
gging.Level.SEVERE, null, ex);
    }
//</editor-fold>
//</editor-fold>

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

```

```

    }

    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JButton jButton3;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    private javax.swing.JTextField jTextField1;
    // End of variables declaration
}

```

### I) EmployeeRecord.java

```

/*
 * 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.
 */
package JelledMartInformationSystem;

/**
 *
 * @author User
 */
public class EmployeeRecord {
    private String name;
    private String email;
    private String password;
    private long phoneNumber;
    private String gender;
}

```

```
private String country;

public EmployeeRecord (String name, String email, String password, long
phoneNumber, String gender, String country){
    this.name=name;
    this.email=email;
    this.password=password;
    this.phoneNumber=phoneNumber;
    this.gender=gender;
    this.country=country;
}

public String getName (){
    return name;
}

public void setName(String name1){
    name=name1;
}

public String getEmail (){
    return email;
}

public void setEmail(String email1){
    email=email1;
}

public String getPassword(){
    return password;
}

public void setPassword(String password1){
    password=password1;
}
```

```
    }

    public long getPhoneNumber (){
        return phoneNumber;
    }

    public void setPhoneNumber(long phoneNumber1){
        phoneNumber=phoneNumber1;
    }

    public String getGender (){
        return gender;
    }

    public void setgender(String gender1){
        gender=gender1;
    }

    public String getCountry (){
        return country;
    }

    public void setCountry(String country1){
        country=country1;
    }
}
```

## J) ItemInfo.java

```
/*
```



- \* 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.

```
*/
```

```
package JelledMartInformationSystem;
```

```
import javax.swing.JOptionPane;
```

```
import javax.swing.JTable;
```

```
import javax.swing.RowFilter;
```

```
import javax.swing.table.DefaultTableModel;
```

```
import javax.swing.table.TableRowSorter;
```

```
/**
```

```
*
```

```
* @author User
```

```
*/
```

```
public class ItemInfo extends javax.swing.JFrame {
```

```
    DefaultTableModel dtm;
```

```
    int[] n;
```

```
/**
```

```
* Creates new form ItemInfo
```

```
*/
```

```
public ItemInfo() {
```

```
    initComponents();
```

```
}
```

```
/**
```

```
* 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() {

    jLabel1 = new javax.swing.JLabel();
    jButton1 = new javax.swing.JButton();
    jButton2 = new javax.swing.JButton();
    jButton3 = new javax.swing.JButton();
    jTextField1 = new javax.swing.JTextField();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
    addWindowListener(new java.awt.event.WindowAdapter() {
        public void windowOpened(java.awt.event.WindowEvent evt) {
            formWindowOpened(evt);
        }
    });

    jLabel1.setFont(new java.awt.Font("Arial", 1, 24)); // NOI18N
    jLabel1.setText("Item Info");

    jButton1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
    jButton1.setText("Back");
    jButton1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton1ActionPerformed(evt);
        }
    });

```

```
});
```

```
jButton2.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
jButton2.setText("Sort by Price");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});
```

```
jButton3.setText("Search");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});
```

```
jTextField1.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseReleased(java.awt.event.MouseEvent evt) {
        jTextField1MouseReleased(evt);
    }
});
jTextField1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jTextField1KeyReleased(evt);
    }
});
```

```
jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
```

```

    },
    new String [] {
        "Item ID", "Item Name", "Item Price", "Item Category", "Price Range",
        "Item Quantity"
    }
) {
    Class[] types = new Class [] {
        java.lang.String.class, java.lang.String.class, java.lang.Integer.class,
        java.lang.Object.class, java.lang.Object.class, java.lang.Integer.class
    };
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false, false
    };

    public Class getColumnClass(int columnIndex) {
        return types [columnIndex];
    }

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});

jTable1.getTableHeader().setReorderingAllowed(false);
jScrollPane1.setViewportView(jTable1);
if (jTable1.getColumnModel().getColumnCount() > 0) {
    jTable1.getColumnModel().getColumn(0).setResizable(false);
    jTable1.getColumnModel().getColumn(1).setResizable(false);
    jTable1.getColumnModel().getColumn(2).setResizable(false);
    jTable1.getColumnModel().getColumn(3).setResizable(false);
    jTable1.getColumnModel().getColumn(4).setResizable(false);
    jTable1.getColumnModel().getColumn(5).setResizable(false);
}

```

```

    }

```

```

        javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jButton1)
                .addGap(72, 72, 72)

            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEA
DING)
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE, 89,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(19, 19, 19)
                    .addComponent(jButton3,
javax.swing.GroupLayout.PREFERRED_SIZE, 73,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(18, 18, 18)
                    .addComponent(jButton2))
                .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                    .addComponent(jLabel1)
                    .addGap(155, 155, 155)))
                .addContainerGap(30, Short.MAX_VALUE))
            .addComponent(jScrollPane1)

```

```

    );
    layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jLabel1)
        .addGap(18, 18, 18)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BAS
ELINE)
        .addComponent(jButton1)
        .addComponent(jButton2)
        .addComponent(jButton3)
        .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
40, Short.MAX_VALUE)
        .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 252,
javax.swing.GroupLayout.PREFERRED_SIZE))
    );

    pack();
    setLocationRelativeTo(null);
} // </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

```

```

        // TODO add your handling code here:
        setVisible(false);
        Admin ad = new Admin();
        ad.setVisible(true);
    }

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    selectionSort(2);

}

public static int removeDuplicateElements(int arr[], int n) {
    if (n == 0 || n == 1) {
        return n;
    }
    int[] temp = new int[n];
    int j = 0;
    for (int i = 0; i < n - 1; i++) {
        if (arr[i] != arr[i + 1]) {
            temp[j++] = arr[i];
        }
    }
    temp[j++] = arr[n - 1];
    // Changing original array
    for (int i = 0; i < j; i++) {
        arr[i] = temp[i];
    }
    return j;
}

```

```

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    String iid = jTextField1.getText();

    selectionSort(0);

    try {
        if (iid.isBlank() == false) {
            dtm.setRowCount(0);
            int id = Integer.parseInt(jTextField1.getText().toString());
            int li = 0;
            int hi = n.length - 1;
            int mi = (li + hi) / 2;
            while (li <= hi) {
                if (n[mi] == id) {
                    for (ItemRecord i : AddItem.item) {
                        if (id == i.getItemId()) {
                            Object[] o = {i.getItemId(), i.getItemName(), i.getItemPrice(),
i.getItemCategory(), i.getPriceRange(), i.getItemQuantity()};
                            dtm.addRow(o);
                            System.out.println(n[mi]);
                        }
                    }
                    //          System.out.println(empName);
                    break;
                } else if (n[mi] < id) {
                    li = mi + 1;
                } else {
                    hi = mi - 1;
                }
            }
        }
    }
}

```



```

        mi = (li + hi) / 2;
    }

    if (li > hi) {
        JOptionPane.showMessageDialog(rootPane, "No such item
found!");
    }
    } else {
        JOptionPane.showMessageDialog(rootPane, "Enter price please",
"Error", JOptionPane.ERROR_MESSAGE);
        table(iid);
    }
    } catch (NumberFormatException nfe) {
        JOptionPane.showMessageDialog(rootPane, "Enter an integer value
please", "Error", JOptionPane.ERROR_MESSAGE);
    }
}

private void formWindowOpened(java.awt.event.WindowEvent evt) {
    // TODO add your handling code here:
    addTable();
}

public void addTable() {

    dtm = (DefaultTableModel) jTable1.getModel();

    for (ItemRecord itm2 : AddItem.item) {
        int itID = itm2.getItemID();
        String itemName = itm2.getItemName();
        int price = itm2.getItemPrice();
    }
}

```

```

        String category = itm2.getItemCategory();
        String priceRange = itm2.getPriceRange();
        int quantity = itm2.getItemQuantity();
        Object[] o = {itmID, itemName, price, category, priceRange, quantity};
        dtm.addRow(o);
    }
}

private void jTextField1KeyReleased(java.awt.event.KeyEvent evt) {
    // TODO add your handling code here:

    String iName = jTextField1.getText().toLowerCase();
    if (iName.isBlank() == true) {
        dtm.setRowCount(0);
        addTable();
        //      table(iName);
    }

}

private void jTextField1MouseReleased(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:
    dtm.setRowCount(0);
    addTable();
}

private void selectionSort(int col) {
    int rowCount = jTable1.getRowCount();
    n = new int[rowCount];

    if (rowCount != 0) {

```

```

    for (int i = 0; i < rowCount; i++) {
        int num = Integer.parseInt(jTable1.getValueAt(i, col).toString());
        n[i] = num;
    }

}

int length = removeDuplicateElements(n, rowCount);
if (length != 0) {
    // Selection Sort
    int min;
    int tempPrice;

    for (int i = 0; i < length; i++) {
        dtm.setRowCount(0);
        min = i;
        for (int j = i + 1; j < length; j++) {

            if (n[j] < n[min]) {
                min = j;
            }
        }

        tempPrice = n[i];
        n[i] = n[min];
        n[min] = tempPrice;
    }

    for (int z = 0; z < length; z++) {
        for (ItemRecord it : AddItem.item) {
            int priceItem = it.getItemPrice();

```

```

        if (pricItem == n[z]) {
            Object[] o = {it.getItemId(), it.getItemName(), it.getItemPrice(),
it.getItemCategory(), it.getPriceRange(), it.getItemQuantity()};
            dtm.addRow(o);
        }
    }
}
}
}
}

```

```

private void table(String search) {
    //System.out.println(search);
    dtm = (DefaultTableModel) jTable1.getModel();
    TableRowSorter<DefaultTableModel> tr = new
TableRowSorter<DefaultTableModel>(dtm);
    jTable1.setRowSorter(tr);
    tr.setRowFilter(RowFilter.regexFilter(search));

}

```

```

/**
 * @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());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

        java.util.logging.Logger.getLogger(ItemInfo.class.getName()).log(java.util.logging
            .Level.SEVERE, null, ex);

    } catch (InstantiationException ex) {

        java.util.logging.Logger.getLogger(ItemInfo.class.getName()).log(java.util.logging
            .Level.SEVERE, null, ex);

    } catch (IllegalAccessException ex) {

        java.util.logging.Logger.getLogger(ItemInfo.class.getName()).log(java.util.logging
            .Level.SEVERE, null, ex);

    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

        java.util.logging.Logger.getLogger(ItemInfo.class.getName()).log(java.util.logging
            .Level.SEVERE, null, ex);

    }
}
//</editor-fold>
//</editor-fold>

```

```

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

                Login ln = new Login();
                ln.setVisible(true);
            }
        });
    }

// Variables declaration - do not modify
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JButton jButton3;
private javax.swing.JLabel jLabel1;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JTable jTable1;
private javax.swing.JTextField jTextField1;
// End of variables declaration
}

```

### K) ItemRecord.java

```

/*
 * 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.
 */
package JelledMartInformationSystem;

```

```
/**
 *
 * @author User
 */
public class ItemRecord {
    private int itemID;
    private String itemName;
    private int itemPrice;
    private String itemCategory;
    private int itemQuantity;
    private String priceRange;

    public ItemRecord(int itemID,String itemName,int itemPrice, String
itemCategory,String priceRange,int itemQuantity){
        this.itemName = itemName;
        this.itemID = itemID;
        this.itemPrice = itemPrice;
        this.itemCategory = itemCategory;
        this.itemQuantity = itemQuantity;
        this.priceRange= priceRange;

    }
    public String getItemName(){
        return itemName;

    }
    public void setItemName(String itemName){
        this.itemName = itemName;
    }
    public int getItemId(){
        return itemID;
    }
}
```

```
    }  
    public void setItemId(int itemId){  
        this.itemId = itemId;  
    }  
    public int getItemPrice(){  
        return itemPrice;  
    }  
    public void setItemPrice(int itemPrice){  
        this.itemPrice=itemPrice;  
    }  
  
    public String getItemCategory(){  
        return itemCategory;  
    }  
    public void setItemCategory(String itemCategory){  
        this.itemCategory =itemCategory;  
    }  
    public int getItemQuantity(){  
        return itemQuantity;  
    }  
    public void setItemQuantity(int itemQuantity){  
        this.itemQuantity = itemQuantity;  
    }  
  
    public String getPriceRange(){  
        return priceRange;  
    }
```



```

    }
    public void setPriceRange(String priceRange){
        this.priceRange = priceRange;
    }
}

```

## L) Login.java

```

/*
 * 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.
 */
package JelledMartInformationSystem;

import java.util.ArrayList;
import javax.swing.*.*;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;
import javax.swing.table.TableRowSorter;

/**
 *
 * @author User
 */
public class Login extends javax.swing.JFrame {

    public static String query;
    /**
     * Creates new form Login
     */
    DefaultTableModel model;

```

```

public Login() {
    initComponents();
}

/**
 * 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() {

    jPanel1 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jButton1 = new javax.swing.JButton();
    jTextField1 = new javax.swing.JTextField();
    jTextField2 = new javax.swing.JTextField();
    jLabel3 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
    addWindowListener(new java.awt.event.WindowAdapter() {
        public void windowOpened(java.awt.event.WindowEvent evt) {
            formWindowOpened(evt);
        }
    });

```

```

    }
});

jLabel1.setFont(new java.awt.Font("Arial", 1, 14)); // NOI18N
jLabel1.setText("Username");

jLabel2.setFont(new java.awt.Font("Arial", 1, 14)); // NOI18N
jLabel2.setText("Password");

jButton1.setFont(new java.awt.Font("Arial", 1, 14)); // NOI18N
jButton1.setText("Login");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

jTextField1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jTextField1KeyReleased(evt);
    }
    public void keyTyped(java.awt.event.KeyEvent evt) {
        jTextField1KeyTyped(evt);
    }
});

jLabel3.setFont(new java.awt.Font("Arial", 1, 24)); // NOI18N
jLabel3.setForeground(new java.awt.Color(51, 51, 255));
jLabel3.setText("Jelled Mart Information System");

```

```

        javax.swing.GroupLayout jPanel1Layout = new
javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()
            .addGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addComponent(jLabel5)
                .addGap(107, 107, 107)
                .addComponent(jButton1)
                .addGap(38, 38, 38))
            .addGroup(jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                .addGroup(jPanel1Layout.createSequentialGroup()

                    .addGroup(jPanel1Layout.createSequentialGroup()

                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                            .addGroup(jPanel1Layout.createSequentialGroup()

                                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                                    .addGroup(jPanel1Layout.createSequentialGroup()

                                        .addComponent(jLabel1)
                                        .addComponent(jLabel2))
                                    .addGroup(jPanel1Layout.createSequentialGroup()

                                        .addGap(18, 18, 18)

```

```

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
            .addComponent(jTextField1,
javax.swing.GroupLayout.DEFAULT_SIZE, 203, Short.MAX_VALUE)
            .addComponent(jTextField2)))
        .addComponent(jLabel3)))
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addGap(202, 202, 202)
        .addComponent(jLabel4)))
    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
);
jPanel1Layout.setVerticalGroup(

```

```

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

```

```

    .addGroup(jPanel1Layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jLabel3)

```

```

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jLabel4)

```

```

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

```

```

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel1)
            .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE,

```

```

javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(11, 11, 11)
            .addComponent(jButton1))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jLabel5)))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.BASELINE)
        .addComponent(jLabel2)
        .addComponent(jTextField2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addContainerGap(56, Short.MAX_VALUE))
);

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {"admin", "admin", "administrator"}
    },
    new String [] {

```

```

        "Username", "Password", "Type"
    }
) {
    Class[] types = new Class [] {
        java.lang.String.class, java.lang.String.class, java.lang.String.class
    };

    public Class getColumnClass(int columnIndex) {
        return types [columnIndex];
    }
});

jTable1.getTableHeader().setReorderingAllowed(false);
jScrollPane1.setViewportView(jTable1);
if (jTable1.getColumnModel().getColumnCount() > 0) {
    jTable1.getColumnModel().getColumn(0).setResizable(false);
    jTable1.getColumnModel().getColumn(1).setResizable(false);
    jTable1.getColumnModel().getColumn(2).setResizable(false);
}

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)
        .addComponent(jScrollPane1)
    );
layout.setVerticalGroup(

```

```

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addComponent(jPanel1,
            javax.swing.GroupLayout.PREFERRED_SIZE,
            javax.swing.GroupLayout.DEFAULT_SIZE,
            javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(jScrollPane1,
                javax.swing.GroupLayout.PREFERRED_SIZE, 97,
                javax.swing.GroupLayout.PREFERRED_SIZE))
    );

pack();
setLocationRelativeTo(null);
} // </editor-fold>

```

```

private void table(String search) {
    model = (DefaultTableModel) jTable1.getModel();
    TableRowSorter<DefaultTableModel> tr = new
    TableRowSorter<DefaultTableModel>(model);
    jTable1.setRowSorter(tr);
    tr.setRowFilter(RowFilter.regexFilter(search));

}

```

```

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    String username = jTextField1.getText().toLowerCase().trim();

```



```

String password = jTextField2.getText().toLowerCase().trim();
int rowCount = jTable1.getRowCount();
int colCount = jTable1.getColumnCount();

if (username.isEmpty() == true) {
    JOptionPane.showMessageDialog(rootPane, "Error", "Please Enter
Username", JOptionPane.WARNING_MESSAGE);
}
else if (password.isEmpty() == true) {
    JOptionPane.showMessageDialog(rootPane, "Error", "Please Enter
Password", JOptionPane.WARNING_MESSAGE);
} else {
    if (username.equals("admin") && password.equals("admin")) {
        Admin log = new Admin();
        log.setVisible(true);
        setVisible(false);
    } else {
        if (RegisterEmployee.employee.isEmpty() == false) {
            int temp = 0;
            for (EmployeeRecord em : RegisterEmployee.employee) {
                String user = em.getName().toLowerCase();
                String pass = em.getPassword().toLowerCase();
                if (user.equals(username) && pass.equals(password)) {
                    Employee e = new Employee();
                    e.setVisible(true);
                    setVisible(false);
                    temp = temp + 1;
                }
            }
        }
    }
}

```

```
        }
        if (temp == 0) {

            JOptionPane.showMessageDialog(rootPane, "Error", "Employee
Username and Password do not match.", JOptionPane.WARNING_MESSAGE);

        }
        } else {
            JOptionPane.showMessageDialog(rootPane, "Error", "Employee is
not registered yet.", JOptionPane.WARNING_MESSAGE);

        }
    }
}

}

private void jTextField1KeyTyped(java.awt.event.KeyEvent evt) {

}

private void jTextField1KeyReleased(java.awt.event.KeyEvent evt) {
    // TODO add your handling code here

    query = (String) jTextField1.getText().toLowerCase();
    table(query);

}
```

```

private void formWindowOpened(java.awt.event.WindowEvent evt) {
    // TODO add your handling code here:

    if (RegisterEmployee.employee != null) {
        model = (DefaultTableModel) jTable1.getModel();
        for (EmployeeRecord emm2 : RegisterEmployee.employee) {
            String name = emm2.getName();
            String type = "employee";

            String password = emm2.getPassword();

            Object[] o = {name, password, type};
            model.addRow(o);
        }
    }
}

/**
 * @param args the command line arguments
 */
public static void main(String args[]) throws Exception {
    /* 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());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Le
vel.SEVERE, null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Le
vel.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Le
vel.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Login.class.getName()).log(java.util.logging.Le
vel.SEVERE, null, ex);
    }
}
//</editor-fold>

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

```

```

    });
}

// Variables declaration - do not modify
private javax.swing.JButton jButton1;
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.JTable jTable1;
private javax.swing.JTextField jTextField1;
private javax.swing.JTextField jTextField2;
// End of variables declaration
}

```

### M) MyProfile.java

```

/*
 * 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.
 */
package JelledMartInformationSystem;

/**
 *
 * @author User
 */
public class MyProfile extends javax.swing.JFrame {

```

```

/**
 * Creates new form MyProfile
 */
public MyProfile() {
    initComponents();
}

/**
 * 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() {

    jPanel2 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    jTextField1 = new javax.swing.JTextField();
    jTextField2 = new javax.swing.JTextField();
    jTextField3 = new javax.swing.JTextField();
    jButton2 = new javax.swing.JButton();
    jLabel7 = new javax.swing.JLabel();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
    addWindowListener(new java.awt.event.WindowAdapter() {
        public void windowOpened(java.awt.event.WindowEvent evt) {

```

```
        formWindowOpened(evt);
    }
});

jLabel1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jLabel1.setText("Name");

jLabel2.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jLabel2.setText("Email");

jLabel3.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jLabel3.setText("Phone");

jTextField1.setEditable(false);

jTextField2.setEditable(false);

jTextField3.setEditable(false);

jButton2.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jButton2.setText("Back");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

jLabel7.setFont(new java.awt.Font("Arial", 1, 24)); // NOI18N
jLabel7.setText("My Profile");
```

```

    javax.swing.GroupLayout jPanel2Layout = new
javax.swing.GroupLayout(jPanel2);
    jPanel2.setLayout(jPanel2Layout);
    jPanel2Layout.setHorizontalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()

            .add(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .add(jPanel2Layout.createSequentialGroup()
                    .add(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .add(jPanel2Layout.createSequentialGroup()
                            .add(jLabel1)
                            .addPreferredGap(LayoutStyle.ComponentPlacement.RELATED)
                            .add(jLabel2)
                            .add(jLabel3)
                            .addGap(34, 34, 34)

                        .add(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .add(jPanel2Layout.createSequentialGroup()
                                .add(jTextField3,
javax.swing.GroupLayout.DEFAULT_SIZE, 179, Short.MAX_VALUE)
                                .add(jTextField2,
javax.swing.GroupLayout.Alignment.TRAILING)
                                .add(jTextField1)))
                            .addGroup(jPanel2Layout.createSequentialGroup()
                                .addContainerGap()
                                .add(jButton2))

```



```

        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(100, 100, 100)
            .addComponent(jLabel7)))
        .addContainerGap(20, Short.MAX_VALUE))
    );
    jPanel2Layout.setVerticalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jPanel2Layout.createSequentialGroup()
            .addComponent(jLabel7)
            .addGap(18, 18, 18)
            .addComponent(jButton2)
            .addGap(2, 2, 2)

        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel1)
            .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(37, 37, 37)

        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel2)
            .addComponent(jTextField2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

```

```

        .addGap(45, 45, 45)

        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel3)
            .addComponent(jTextField3,
                javax.swing.GroupLayout.PREFERRED_SIZE,
                javax.swing.GroupLayout.DEFAULT_SIZE,
                javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(148, Short.MAX_VALUE))
    );

    javax.swing.GroupLayout layout = new
    javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(

        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
                layout.createSequentialGroup()
                    .addContainerGap(34, Short.MAX_VALUE)
                    .addComponent(jPanel2,
                        javax.swing.GroupLayout.PREFERRED_SIZE,
                        javax.swing.GroupLayout.DEFAULT_SIZE,
                        javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addContainerGap())
            );
    layout.setVerticalGroup(

        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

```

```

        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );

```

```

    pack();
    setLocationRelativeTo(null);
} // </editor-fold>

```

```

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    Employee em = new Employee();
    em.setVisible(true);
    setVisible(false);
}

```

```

private void formWindowOpened(java.awt.event.WindowEvent evt) {
    // TODO add your handling code here:
    for(EmployeeRecord er: RegisterEmployee.employee){
        String name = er.getName();
        String email=er.getEmail();
        long phoneNumber=er.getPhoneNumber();
        if(name.equals(Login.query)){

            jTextField1.setText(name);
            jTextField2.setText(email);
            jTextField3.setText(Long.toString(phoneNumber));
        }
    }
}

```

```

    }

    /**
     * @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());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(MyProfile.class.getName()).log(java.util.logging
g.Level.SEVERE, null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(MyProfile.class.getName()).log(java.util.logging
g.Level.SEVERE, null, ex);
        } catch (IllegalAccessException ex) {

```

```
java.util.logging.Logger.getLogger(MyProfile.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
```

```
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

```
java.util.logging.Logger.getLogger(MyProfile.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
```

```
    }
```

```
//</editor-fold>
```

```
/* Create and display the form */
```

```
java.awt.EventQueue.invokeLater(new Runnable() {
```

```
    public void run() {
```

```
//        new MyProfile().setVisible(true);
```

```
        Login In = new Login();
```

```
        In.setVisible(true);
```

```
    }
```

```
});
```

```
}
```

```
// Variables declaration - do not modify
```

```
private javax.swing.JButton jButton2;
```

```
private javax.swing.JLabel jLabel1;
```

```
private javax.swing.JLabel jLabel2;
```

```
private javax.swing.JLabel jLabel3;
```

```
private javax.swing.JLabel jLabel7;
```

```
private javax.swing.JPanel jPanel2;
```

```
private javax.swing.JTextField jTextField1;
```

```
private javax.swing.JTextField jTextField2;
```

```
private javax.swing.JTextField jTextField3;
```

```
// End of variables declaration
```

```
}
```

## **N) RegisterEmployee.java**

```
/*
```

```
* 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.
```

```
*/
```

```
package JelledMartInformationSystem;
```

```
import java.util.ArrayList;
```

```
import javax.swing.JFrame;
```

```
import javax.swing.JOptionPane;
```

```
/**
```

```
*
```

```
* @author User
```

```
*/
```

```
public class RegisterEmployee extends javax.swing.JFrame {
```

```
/**
```

```
* Creates new form RegisterEmployee
```

```
*/
```

```
public static ArrayList<EmployeeRecord> employee = new  
ArrayList<EmployeeRecord>();
```

```
public RegisterEmployee() {  
    initComponents();  
}
```

```
/**
```

```
 * 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() {
```

```
    buttonGroup1 = new javax.swing.ButtonGroup();
```

```
    jPanel1 = new javax.swing.JPanel();
```

```
    jLabel1 = new javax.swing.JLabel();
```

```
    jLabel2 = new javax.swing.JLabel();
```

```
    jLabel3 = new javax.swing.JLabel();
```

```
    jLabel4 = new javax.swing.JLabel();
```

```
    jLabel5 = new javax.swing.JLabel();
```

```
jLabel6 = new javax.swing.JLabel();

jTextField1 = new javax.swing.JTextField();

jTextField2 = new javax.swing.JTextField();

jTextField3 = new javax.swing.JTextField();

jTextField4 = new javax.swing.JTextField();

jRadioButton1 = new javax.swing.JRadioButton();

jRadioButton2 = new javax.swing.JRadioButton();

jComboBox1 = new javax.swing.JComboBox<>();

jButton1 = new javax.swing.JButton();

jButton2 = new javax.swing.JButton();

jLabel7 = new javax.swing.JLabel();

jLabel8 = new javax.swing.JLabel();

jLabel10 = new javax.swing.JLabel();

jLabel12 = new javax.swing.JLabel();

jLabel11 = new javax.swing.JLabel();

jLabel13 = new javax.swing.JLabel();

jLabel14 = new javax.swing.JLabel();

jLabel15 = new javax.swing.JLabel();


setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);


jLabel1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N

jLabel1.setText("Name");
```



```
jLabel2.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
```

```
jLabel2.setText("Email");
```

```
jLabel3.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
```

```
jLabel3.setText("Password");
```

```
jLabel4.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
```

```
jLabel4.setText("Phone Number");
```

```
jLabel5.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
```

```
jLabel5.setText("Gender");
```

```
jLabel6.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
```

```
jLabel6.setText("Country");
```

```
buttonGroup1.add(jRadioButton1);
```

```
jRadioButton1.setText("Male");
```

```
buttonGroup1.add(jRadioButton2);
```

```
jRadioButton2.setText("Female");
```

```
jComboBox1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
```

```
jComboBox1.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {  
"SELECT COUNTRY", "Nepal", "United States", "Belgium", "Germany" }));
```

```
jButton1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jButton1.setText("Register ");  
jButton1.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton1ActionPerformed(evt);  
    }  
});
```

```
jButton2.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N  
jButton2.setText("Back");  
jButton2.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton2ActionPerformed(evt);  
    }  
});
```

```
jLabel7.setFont(new java.awt.Font("Arial", 1, 24)); // NOI18N  
jLabel7.setText("REGISTER EMPLOYEE");
```

```
jLabel8.setBackground(new java.awt.Color(0, 0, 204));
```

```
jLabel8.setFont(new java.awt.Font("Trebuchet MS", 1, 14)); // NOI18N
```

```
jLabel8.setForeground(new java.awt.Color(0, 51, 204));
```

```
jLabel10.setBackground(new java.awt.Color(255, 0, 0));
```

```
jLabel10.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
```

```
jLabel10.setForeground(new java.awt.Color(255, 0, 51));
```

```
jLabel12.setBackground(new java.awt.Color(255, 0, 0));
```

```
jLabel12.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
```

```
jLabel12.setForeground(new java.awt.Color(255, 0, 51));
```

```
jLabel11.setBackground(new java.awt.Color(255, 0, 0));
```

```
jLabel11.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
```

```
jLabel11.setForeground(new java.awt.Color(255, 0, 51));
```

```
jLabel13.setBackground(new java.awt.Color(255, 0, 0));
```

```
jLabel13.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
```

```
jLabel13.setForeground(new java.awt.Color(255, 0, 51));
```

```
jLabel14.setBackground(new java.awt.Color(255, 0, 0));
```

```
jLabel14.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N
```

```
jLabel14.setForeground(new java.awt.Color(255, 0, 51));
```

```
jLabel15.setBackground(new java.awt.Color(255, 0, 0));

jLabel15.setFont(new java.awt.Font("Tahoma", 1, 12)); // NOI18N

jLabel15.setForeground(new java.awt.Color(255, 0, 51));


javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()

        .addGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)

        .addComponent(jLabel7)

        .addGap(102, 102, 102))

    .addGroup(jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LE
ADING)

        .addGroup(jPanel1Layout.createSequentialGroup()

            .addGap()

            .addComponent(jButton2))

        .addGroup(jPanel1Layout.createSequentialGroup()

            .addGap(90, 90, 90)
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jPanel1Layout.createSequentialGroup()
```

```
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
            .addComponent(jLabel5)
```

```
            .addComponent(jLabel6))
```

```
        .addGap(71, 71, 71)
```

```
    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
```

```
        .addComponent(jComboBox1, 0, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
```

```
    .addGroup(jPanel1Layout.createSequentialGroup()
```

```
        .addComponent(jRadioButton1)
```

```
        .addGap(18, 18, 18)
```

```
        .addComponent(jRadioButton2))
```

```
    .addComponent(jLabel13, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))
```

```
    .addGroup(jPanel1Layout.createSequentialGroup()
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
.addComponent(jLabel1)

.addComponent(jLabel2)

.addComponent(jLabel3)

.addComponent(jLabel4))

.addGap(16, 16, 16)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

    .addComponent(jLabel8,
javax.swing.GroupLayout.PREFERRED_SIZE, 181,
javax.swing.GroupLayout.PREFERRED_SIZE)

    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

        .addComponent(jTextField3,
javax.swing.GroupLayout.DEFAULT_SIZE, 179, Short.MAX_VALUE)

        .addComponent(jTextField4)

        .addComponent(jTextField2,
javax.swing.GroupLayout.Alignment.TRAILING)

        .addComponent(jTextField1)

        .addComponent(jLabel10,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)

        .addComponent(jLabel11,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
```

```

        .addComponent(jLabel14,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

        .addComponent(jLabel12,
javax.swing.GroupLayout.PREFERRED_SIZE, 178,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addComponent(jLabel15,
javax.swing.GroupLayout.PREFERRED_SIZE, 164,
javax.swing.GroupLayout.PREFERRED_SIZE)))

        .addGroup(jPanel1Layout.createSequentialGroup())

        .addGap(78, 78, 78)

        .addComponent(jButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 124,
javax.swing.GroupLayout.PREFERRED_SIZE))))))

        .addContainerGap(99, Short.MAX_VALUE))

    );

    jPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jPanel1Layout.createSequentialGroup())

            .addGap(8, 8, 8)

            .addComponent(jLabel7)

        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

            .addGap(8, 8, 8)

            .addComponent(jLabel7)

        .addGroup(jPanel1Layout.createSequentialGroup())

```

```
.addGap(10, 10, 10)

.addComponent(jButton2))

.addGroup(jPanel1Layout.createSequentialGroup()

.addGap(18, 18, 18)

.addComponent(jLabel11,
javax.swing.GroupLayout.PREFERRED_SIZE, 23,
javax.swing.GroupLayout.PREFERRED_SIZE)))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jLabel1)

.addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE, 23,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGap(8, 8, 8)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jLabel2)

.addComponent(jTextField2,
javax.swing.GroupLayout.PREFERRED_SIZE,
```



```
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
  
    .addGap(16, 16, 16)  
  
    .addComponent(jLabel12, javax.swing.GroupLayout.PREFERRED_SIZE, 23,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
  
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
  
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BA  
SELINE)  
  
    .addComponent(jLabel3)  
  
    .addComponent(jTextField3,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)  
  
    .addComponent(jLabel14, javax.swing.GroupLayout.PREFERRED_SIZE, 23,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
  
    .addGap(2, 2, 2)  
  
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BA  
SELINE)  
  
    .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE,  
23, javax.swing.GroupLayout.PREFERRED_SIZE)  
  
    .addComponent(jTextField4,  
javax.swing.GroupLayout.PREFERRED_SIZE,
```

```
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE))  
  
    .addGap(9, 9, 9)  
  
    .addComponent(jLabel15, javax.swing.GroupLayout.PREFERRED_SIZE, 21,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
  
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)  
  
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BA  
SELINE)  
  
    .addComponent(jLabel5)  
  
    .addComponent(jRadioButton1)  
  
    .addComponent(jRadioButton2))  
  
.addGap(6, 6, 6)  
  
    .addComponent(jLabel13, javax.swing.GroupLayout.PREFERRED_SIZE, 15,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
  
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  
  
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BA  
SELINE)  
  
    .addComponent(jLabel6)  
  
    .addComponent(jComboBox1,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

        .addComponent(jLabel8, javax.swing.GroupLayout.PREFERRED_SIZE, 21,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addGap(13, 13, 13)

        .addComponent(jButton1)

        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

    );

    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();
```

```
setLocationRelativeTo(null);
```

```
}// </editor-fold>
```

```
static boolean isNumber(String s)
```

```
{
```

```
    for (int i = 0; i < s.length(); i++)
```

```
        if (Character.isDigit(s.charAt(i)) == false)
```

```
            return false;
```

```
    return true;
```

```
}
```

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
```

```
    // TODO add your handling code here
```

```
//    JFrame f;
```

```
String name = jTextField1.getText();
```

```
String email = jTextField2.getText();
```

```
String password = jTextField3.getText();
```

```
String gender = "";
```

```
if (jRadioButton1.isSelected()) {  
    gender = gender + jRadioButton1.getText();  
}  
  
if (jRadioButton2.isSelected()) {  
    gender = gender + jRadioButton2.getText();  
}  
  
String country = (String) jComboBox1.getSelectedItem();  
  
//Phone number Validation  
  
//Item Name Validation  
  
if(name.isEmpty() == true){  
    JOptionPane.showMessageDialog(rootPane, "Error", "Please enter your Name",  
JOptionPane.WARNING_MESSAGE);  
}  
  
else if (name.matches(".*\\d.*")){  
    JOptionPane.showMessageDialog(rootPane,"Only Text Value can be entered  
in name","Error",JOptionPane.ERROR_MESSAGE);  
}  
  
else if(email.isEmpty() == true){
```

```
        JOptionPane.showMessageDialog(rootPane, "Error", "Please enter your email",  
JOptionPane.WARNING_MESSAGE);
```

```
    }
```

```
    else if(password.isEmpty() == true){
```

```
        JOptionPane.showMessageDialog(rootPane, "Error", "Please enter a  
password", JOptionPane.WARNING_MESSAGE);
```

```
    }
```

```
    else if (isNumber(jTextField4.getText().trim()) == false){
```

```
        JOptionPane.showMessageDialog(rootPane, "Error", "Please Enter correct  
phone number", JOptionPane.WARNING_MESSAGE);
```

```
    }
```

```
    else if(jTextField4.getText().toLowerCase().trim().isEmpty() == true){
```

```
        JOptionPane.showMessageDialog(rootPane, "Error", "Please enter your phone  
number", JOptionPane.WARNING_MESSAGE);
```

```
    }
```

```
    else if(gender.isEmpty() == true){
```

```
        JOptionPane.showMessageDialog(rootPane, "Error", "Please select your  
Gender", JOptionPane.WARNING_MESSAGE);
```

```
    }
```

```
else if(country.equals("SELECT COUNTRY")){

    JOptionPane.showMessageDialog(rootPane, "Error", "Please select your
Country", JOptionPane.WARNING_MESSAGE);

}

else{

    long pNumber = Long.parseLong(jTextField4.getText());

    int exit = 1;

    for(EmployeeRecord e: employee){

        if(e.getName().toLowerCase().compareTo(name) == 0){

            exit = 2;

            break;

        }

        else if(e.getPhoneNumber()==pNumber){

            exit = 3;

            break;

        }

    }

}
```

```
    }

    if(exit == 2){
        JOptionPane.showMessageDialog(rootPane, "Error" ,"Name already added",
JOptionPane.ERROR_MESSAGE);
    }

    else if(exit == 3){
        JOptionPane.showMessageDialog(rootPane, "Error" ,"Phone number already
exit", JOptionPane.ERROR_MESSAGE);
    }

    else if(exit == 1){
        EmployeeRecord emm = new EmployeeRecord(name, email, password,
pNumber, gender, country);

        employee.add(emm);

        JOptionPane.showMessageDialog(rootPane, "Success" ,"Employee has
been registered", JOptionPane.INFORMATION_MESSAGE);

        jTextField1.setText("");
        jTextField2.setText("");
        jTextField3.setText("");
        jComboBox1.setSelectedIndex(0);
    }
}
```



```
        jTextField4.setText("");

        buttonGroup1.clearSelection();
    }

}

}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:

    setVisible(false);

    Admin ad = new Admin();

    ad.setVisible(true);
}

/**
 * @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());

            break;

        }

    }

} catch (ClassNotFoundException ex) {

    java.util.logging.Logger.getLogger(RegisterEmployee.class.getName()).log(java.util.logg
ing.Level.SEVERE, null, ex);

} catch (InstantiationException ex) {

    java.util.logging.Logger.getLogger(RegisterEmployee.class.getName()).log(java.util.logg
ing.Level.SEVERE, null, ex);

} catch (IllegalAccessException ex) {

```

```
java.util.logging.Logger.getLogger(RegisterEmployee.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
```

```
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

```
java.util.logging.Logger.getLogger(RegisterEmployee.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
```

```
    }
```

```
//</editor-fold>
```

```
//</editor-fold>
```

```
/* Create and display the form */
```

```
java.awt.EventQueue.invokeLater(new Runnable() {
```

```
    public void run() {
```

```
//        new RegisterEmployee().setVisible(true);
```

```
        Login In = new Login();
```

```
        In.setVisible(true);
```

```
    }
```

```
});
```

```
}
```

```
// Variables declaration - do not modify
```

```
private javax.swing.ButtonGroup buttonGroup1;
```

```
private javax.swing.JButton jButton1;  
private javax.swing.JButton jButton2;  
private javax.swing.JComboBox<String> jComboBox1;  
private javax.swing.JLabel jLabel1;  
private javax.swing.JLabel jLabel10;  
private javax.swing.JLabel jLabel11;  
private javax.swing.JLabel jLabel12;  
private javax.swing.JLabel jLabel13;  
private javax.swing.JLabel jLabel14;  
private javax.swing.JLabel jLabel15;  
private javax.swing.JLabel jLabel2;  
private javax.swing.JLabel jLabel3;  
private javax.swing.JLabel jLabel4;  
private javax.swing.JLabel jLabel5;  
private javax.swing.JLabel jLabel6;  
private javax.swing.JLabel jLabel7;  
private javax.swing.JLabel jLabel8;  
private javax.swing.JPanel jPanel1;  
private javax.swing.JRadioButton jRadioButton1;  
private javax.swing.JRadioButton jRadioButton2;  
private javax.swing.JTextField jTextField1;  
private javax.swing.JTextField jTextField2;  
private javax.swing.JTextField jTextField3;
```

```

private javax.swing.JTextField jTextField4;

// End of variables declaration

}

```

## O) StartBilling.java

```

/*
 * 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.
 */
package JelledMartInformationSystem;

import static JelledMartInformationSystem.BillItem.bRecord;

/**
 *
 * @author User
 */
public class StartBilling extends javax.swing.JFrame {

    /**
     * Creates new form StartBilling
     */
    public StartBilling() {
        initComponents();
    }

    /**
     * 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() {

    jLabel4 = new javax.swing.JLabel();
    jPanel2 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    jTextField1 = new javax.swing.JTextField();
    jTextField2 = new javax.swing.JTextField();
    jTextField3 = new javax.swing.JTextField();
    jButton1 = new javax.swing.JButton();
    jButton2 = new javax.swing.JButton();
    jLabel7 = new javax.swing.JLabel();
    jScrollPane1 = new javax.swing.JScrollPane();
    JTextArea1 = new javax.swing.JTextArea();
    jLabel5 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    jLabel8 = new javax.swing.JLabel();
    jLabel9 = new javax.swing.JLabel();
    jLabel10 = new javax.swing.JLabel();

    jLabel4.setText("jLabel4");

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
    addWindowListener(new java.awt.event.WindowAdapter() {
        public void windowOpened(java.awt.event.WindowEvent evt) {

```

```
        formWindowOpened(evt);
    }
});

jLabel1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jLabel1.setText("Phone Number");

jLabel2.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jLabel2.setText("Customer Name");

jLabel3.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jLabel3.setText("Total Bill/Amount");

jButton1.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jButton1.setText("Billing Done");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

jButton2.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jButton2.setText("Back");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

jLabel7.setFont(new java.awt.Font("Arial", 1, 24)); // NOI18N
jLabel7.setText("Start Billing");
```

```

jTextArea1.setColumns(20);
jTextArea1.setRows(5);
jScrollPane1.setViewportView(jTextArea1);

jLabel5.setFont(new java.awt.Font("Arial", 1, 12)); // NOI18N
jLabel5.setText("Bill Information");

jLabel6.setBackground(new java.awt.Color(255, 51, 51));
jLabel6.setFont(new java.awt.Font("Times New Roman", 1, 14)); // NOI18N
jLabel6.setForeground(new java.awt.Color(255, 0, 0));

jLabel8.setBackground(new java.awt.Color(255, 51, 51));
jLabel8.setFont(new java.awt.Font("Times New Roman", 1, 14)); // NOI18N
jLabel8.setForeground(new java.awt.Color(255, 0, 0));

jLabel9.setBackground(new java.awt.Color(255, 51, 51));
jLabel9.setFont(new java.awt.Font("Times New Roman", 1, 14)); // NOI18N
jLabel9.setForeground(new java.awt.Color(255, 0, 0));

jLabel10.setBackground(new java.awt.Color(0, 0, 153));
jLabel10.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
NOI18N
jLabel10.setForeground(new java.awt.Color(51, 0, 204));

javax.swing.GroupLayout jPanel2Layout = new
javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(

```



```
jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jPanel2Layout.createSequentialGroup())
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
```

```
    .addGroup(jPanel2Layout.createSequentialGroup())
```

```
        .addContainerGap()
```

```
        .addComponent(jButton2)
```

```
        .addGap(309, 309, 309))
```

```
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup())
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
```

```
    .addGroup(jPanel2Layout.createSequentialGroup())
```

```
        .addContainerGap()
```

```
        .addComponent(jButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 124,
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
    .addGroup(jPanel2Layout.createSequentialGroup())
```

```
        .addGap(30, 30, 30)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jPanel2Layout.createSequentialGroup())
```

```
        .addComponent(jLabel3)
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
```

```

        .addComponent(jTextField3,
javax.swing.GroupLayout.PREFERRED_SIZE, 179,
javax.swing.GroupLayout.PREFERRED_SIZE))

    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup())
        .addGap(0, 0, Short.MAX_VALUE)
        .addComponent(jLabel7))

    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup())

    .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING)
        .addComponent(jLabel2)
        .addComponent(jLabel1))

    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

    .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.LEADING, false)
        .addComponent(jTextField1)
        .addComponent(jTextField2)
        .addComponent(jLabel6,
javax.swing.GroupLayout.PREFERRED_SIZE, 179,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel8,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

```

```

        .addComponent(jLabel9,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))))))
        .addGap(29, 29, 29)))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
43, Short.MAX_VALUE)
        .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(25, 25, 25))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup())
        .addGap(0, 0, Short.MAX_VALUE)
        .addComponent(jLabel5)
        .addGap(63, 63, 63))
        .addGroup(jPanel2Layout.createSequentialGroup())
        .addGap(206, 206, 206)
        .addComponent(jLabel10,
javax.swing.GroupLayout.PREFERRED_SIZE, 187,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );
    jPanel2Layout.setVerticalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jPanel2Layout.createSequentialGroup())

```

```

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel2Layout.createSequentialGroup()
        .addGap(12, 12, 12)
        .addComponent(jLabel7)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addComponent(jButton2)
    .addGap(18, 18, 18)
    .addComponent(jLabel5)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 131,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addGroup(jPanel2Layout.createSequentialGroup()
        .addGap(76, 76, 76)
        .addComponent(jLabel9,
javax.swing.GroupLayout.PREFERRED_SIZE, 16,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel2Layout.createSequentialGroup()
        .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addComponent(jLabel6,
javax.swing.GroupLayout.PREFERRED_SIZE, 16,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addComponent(jLabel1))
.addGap(6, 6, 6)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(jLabel2)
    .addComponent(jTextField2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addComponent(jLabel8,
javax.swing.GroupLayout.PREFERRED_SIZE, 17,
javax.swing.GroupLayout.PREFERRED_SIZE)
.addGap(2, 2, 2)
```

```
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(jLabel3)
    .addComponent(jTextField3,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
        116, Short.MAX_VALUE)
            .addComponent(jButton1)))
        .addGap(18, 18, 18)
        .addComponent(jLabel10,
        javax.swing.GroupLayout.PREFERRED_SIZE, 22,
        javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(24, 24, 24))
    );

```

```

        javax.swing.GroupLayout layout = new
        javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(

```

```

        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
        layout.createSequentialGroup()
            .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addContainerGap())
        );
        layout.setVerticalGroup(

```

```

        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jPanel2, javax.swing.GroupLayout.Alignment.TRAILING,
        javax.swing.GroupLayout.DEFAULT_SIZE,
        javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        );

```

```

    pack();
    setLocationRelativeTo(null);
} // </editor-fold>

```

```

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    if (bRecord.isEmpty() == false) {
        bRecord.clear();
    }
}

```

```

    Employee e = new Employee();
    e.setVisible(true);
    setVisible(false);
}

```

```

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    UpdateItem ui = new UpdateItem();
    ui.setVisible(true);
    setVisible(false);
}

```

```

private void formWindowOpened(java.awt.event.WindowEvent evt) {
    // TODO add your handling code here:
    jTextArea1.append("Item_ID" + " --- " + "Item_Name" + " --- " +
        "Item_Price" + " --- " + "Item_Qty" + " --- " + "Total_Price" + "\n");
}

```

```

for(BillingItemRecord br: BillItem.bRecord){
    int ID = br.getItemID();
    String Name = br.getItemName();
    int PerPrice = br.getItemPrice();
}

```

```

        int Qty = br.getItemQuantity();
        int tPrice = br.getTotalPrice();

        jTextArea1.append(ID + "    ---  " + Name + "    ---  " + PerPrice + "
---  " + Qty + "    ---  " + tPrice + "\n");
    }

    jTextArea1.append("Total Bill :- " + Integer.toString(UpdateItem.totalBill));

}

/**
 * @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());
                break;
            }
        }
    }
}

```



```

    }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(StartBilling.class.getName()).log(java.util.loggi
ng.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(StartBilling.class.getName()).log(java.util.loggi
ng.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(StartBilling.class.getName()).log(java.util.loggi
ng.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(StartBilling.class.getName()).log(java.util.loggi
ng.Level.SEVERE, null, ex);
    }
    //</editor-fold>

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

// Variables declaration - do not modify

```

```

    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel10;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JLabel jLabel5;
    private javax.swing.JLabel jLabel6;
    private javax.swing.JLabel jLabel7;
    private javax.swing.JLabel jLabel8;
    private javax.swing.JLabel jLabel9;
    private javax.swing.JPanel jPanel2;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTextArea jTextArea1;
    private javax.swing.JTextField jTextField1;
    private javax.swing.JTextField jTextField2;
    private javax.swing.JTextField jTextField3;
    // End of variables declaration
}

```

## P) UpdateItem.java

```

/*
 * 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.
 */
package JelledMartInformationSystem;

import javax.swing.JFrame;

```

```

import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

/**
 *
 * @author
 */
public class UpdateItem extends javax.swing.JFrame {

    int row;
    int itemPrice;
    DefaultTableModel dtm;
    public static int totalBill;

    /**
     * Creates new form updateItem
     */
    public UpdateItem() {
        initComponents();
    }

    /**
     * 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() {

```

```

jScrollPane1 = new javax.swing.JScrollPane();
jTable1 = new javax.swing.JTable();
jButton1 = new javax.swing.JButton();
jButton2 = new javax.swing.JButton();
jButton3 = new javax.swing.JButton();
jButton4 = new javax.swing.JButton();
jLabel1 = new javax.swing.JLabel();
jTextField1 = new javax.swing.JTextField();
jLabel2 = new javax.swing.JLabel();
jTextField2 = new javax.swing.JTextField();
jTextField3 = new javax.swing.JTextField();
jLabel3 = new javax.swing.JLabel();
jLabel4 = new javax.swing.JLabel();
jTextField4 = new javax.swing.JTextField();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
addWindowListener(new java.awt.event.WindowAdapter() {
    public void windowOpened(java.awt.event.WindowEvent evt) {
        formWindowOpened(evt);
    }
});

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

    },
    new String [] {
        "Item ID", "Item Name", "Item Price", "Item Category", "Item Quantity",
        "Total Price"
    }

```

```
));  
jTable1.addMouseListener(new java.awt.event.MouseAdapter() {  
    public void mouseClicked(java.awt.event.MouseEvent evt) {  
        jTable1MouseClicked(evt);  
    }  
});  
jScrollPane1.setViewportViewView(jTable1);  
  
jButton1.setText("Back");  
jButton1.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton1ActionPerformed(evt);  
    }  
});  
  
jButton2.setText("Update");  
jButton2.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton2ActionPerformed(evt);  
    }  
});  
  
jButton3.setText("Confirm");  
jButton3.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        jButton3ActionPerformed(evt);  
    }  
});  
  
jButton4.setText("Delete");  
jButton4.addActionListener(new java.awt.event.ActionListener() {
```



```

        .addComponent(jButton1))
    .addGroup(layout.createSequentialGroup()
        .addGap(26, 26, 26)
        .addComponent(jLabel1)
        .addGap(18, 18, 18)
        .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)))
    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    .addGroup(layout.createSequentialGroup()
        .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 375,
javax.swing.GroupLayout.PREFERRED_SIZE)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEA
DING)

        .addGroup(layout.createSequentialGroup()
            .addGap(18, 18, 18)

    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEA
DING)

        .addGroup(layout.createSequentialGroup()
            .addComponent(jButton4)

    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
11, Short.MAX_VALUE)
        .addComponent(jButton2))
    .addGroup(layout.createSequentialGroup()

```

```
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addComponent(jLabel2)
```

```
    .addGroup(layout.createSequentialGroup()
```

```
        .addGap(10, 10, 10)
```

```
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addComponent(jLabel3)
```

```
    .addComponent(jLabel4))))
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addComponent(jTextField3,
```

```
    javax.swing.GroupLayout.Alignment.TRAILING)
```

```
    .addComponent(jTextField4)
```

```
    .addComponent(jTextField2,
```

```
    javax.swing.GroupLayout.Alignment.TRAILING))
```

```
    .addContainerGap()))
```

```
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
```

```
    layout.createSequentialGroup()
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,  
    javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
```

```
    .addComponent(jButton3)
```

```
    .addGap(52, 52, 52))))
```

```
);
```

```
layout.setVerticalGroup(
```



```
layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
    .addContainerGap()
    .addComponent(jButton1)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
29, Short.MAX_VALUE)
    .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 275,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addGap(3, 3, 3)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BAS
ELINE)
    .addComponent(jLabel1)
    .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
    .addGap(76, 76, 76)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BAS
ELINE)
    .addComponent(jTextField2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
.addComponent(jLabel3))
.addGap(45, 45, 45)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BAS
ELINE)
    .addComponent(jTextField3,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(jLabel4))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BAS
ELINE)
    .addComponent(jLabel2)
    .addComponent(jTextField4,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addGap(18, 18, 18)
    .addComponent(jButton3)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BAS
ELINE)
    .addComponent(jButton2)
    .addComponent(jButton4))
    .addGap(35, 35, 35))
```

```

    );

    pack();
    setLocationRelativeTo(null);
} // </editor-fold>

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try{
        JFrame f;
        f = new JFrame();
        int a = JOptionPane.showConfirmDialog(f, "Are you sure?");
        if (a == JOptionPane.OK_OPTION) {
            int updateQty = Integer.parseInt(jTextField4.getText());
            int totalPrice = updateQty * itemPrice;
            jTable1.setValueAt(updateQty, row, 4);
            jTable1.setValueAt(totalPrice, row, 5);
            totalBill();
            jTextField4.setText("");
        }
    } catch (NumberFormatException nfe){
        JOptionPane.showMessageDialog(rootPane, "Enter a integer value please",
"Error", JOptionPane.ERROR_MESSAGE);
    }
}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    int rCount = jTable1.getRowCount();

    if (rCount != 0) {

```

```

int itId;
String itName;
int itPrice;
int itQty;
int tPrice;
int remQty;
String itCategory;

BillItem.bRecord.clear();

for (int i = 0; i < rCount; i++) {
    itId = Integer.parseInt(jTable1.getValueAt(i, 0).toString());
    itName = jTable1.getValueAt(i, 1).toString();
    itPrice = Integer.parseInt(jTable1.getValueAt(i, 2).toString());
    itCategory = jTable1.getValueAt(i, 3).toString();
    itQty = Integer.parseInt(jTable1.getValueAt(i, 4).toString());
    tPrice = Integer.parseInt(jTable1.getValueAt(i, 5).toString());

    BillingItemRecord bi = new BillingItemRecord(itId, itName, itPrice,
itCategory, itQty, tPrice);
    BillItem.bRecord.add(bi);

    for (ItemRecord it : AddItem.item) {

        int idItem = it.getItemId();

        if (itId == idItem) {
            remQty = it.getItemQuantity() - itQty;
            it.setItemQuantity(remQty);
            System.out.println(remQty);
        }
    }
}

```

```

        }
    }

}

} else {
    BillItem.bRecord.clear();
    totalBill = 0;
}

StartBilling sb = new StartBilling();
sb.setVisible(true);
setVisible(false);

}

private void formWindowOpened(java.awt.event.WindowEvent evt) {
    // TODO add your handling code here:
    dtm = (DefaultTableModel) jTable1.getModel();

    for (BillingItemRecord bir : BillItem.bRecord) {
        String name = bir.getItemName();
        int price = bir.getItemPrice();
        int itemID = bir.getItemID();
        String category = bir.getCategory();
        int quantity = bir.getItemQuantity();
        int totalPrice = bir.getTotalPrice();
        Object[] o = {itemID, name, price, category, quantity, totalPrice};
        dtm.addRow(o);
    }
    totalBill();
}

```

```

    }

    public void totalBill() {

        int rowCount = jTable1.getRowCount();
        if (rowCount != 0) {
            totalBill = 0;
            for (int i = 0; i < rowCount; i++) {
                int tPrice = Integer.parseInt(jTable1.getValueAt(i, 5).toString());
                totalBill += tPrice;
            }

            jTextField1.setText(Integer.toString(totalBill));
        } else {
            jTextField1.setText("");
            jTextField2.setText("");
            jTextField3.setText("");
            jTextField4.setText("");
        }
    }

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        BillItem bi = new BillItem();
        bi.setVisible(true);
        setVisible(false);
    }

    private void jTable1MouseClicked(java.awt.event.MouseEvent evt) {
        // TODO add your handling code here:

```

```

        row = jTable1.getSelectedRow();
        int id = Integer.parseInt(jTable1.getValueAt(row, 0).toString());
        String itemName = jTable1.getValueAt(row, 1).toString();
        itemPrice = Integer.parseInt(jTable1.getValueAt(row, 2).toString());
        jTextField2.setText(itemName);
        jTextField3.setText(Integer.toString(itemPrice));

    }

    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
        JFrame R;
        R = new JFrame();

        int a = JOptionPane.showConfirmDialog(R, "Are you sure?");
        if (a == JOptionPane.OK_OPTION) {
            row = jTable1.getSelectedRow();
            int ild = Integer.parseInt(jTable1.getValueAt(row, 0).toString());

            dtm.removeRow(row);

            for (BillingItemRecord br : BillItem.bRecord) {
                if (br.getItemID() == ild) {
                    BillItem.bRecord.remove(br);
                    break;
                }
            }
            totalBill();
            jTextField2.setText("");
            jTextField3.setText("");
            jTextField4.setText("");
        }
    }

```

```

    }

}

/**
 * @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());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(UpdateItem.class.getName()).log(java.util.logg
ing.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {

```



```
java.util.logging.Logger.getLogger(UpdateItem.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
```

```
    } catch (IllegalAccessException ex) {
```

```
java.util.logging.Logger.getLogger(UpdateItem.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
```

```
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

```
java.util.logging.Logger.getLogger(UpdateItem.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
```

```
    }
```

```
//</editor-fold>
```

```
//</editor-fold>
```

```
/* Create and display the form */
```

```
java.awt.EventQueue.invokeLater(new Runnable() {
```

```
    public void run() {
```

```
//        new UpdateItem().setVisible(true);
```

```
        Login In = new Login();
```

```
        In.setVisible(true);
```

```
    }
```

```
});
```

```
}
```

```
// Variables declaration - do not modify
```

```
private javax.swing.JButton jButton1;
```

```
private javax.swing.JButton jButton2;
```

```
private javax.swing.JButton jButton3;
```

```
private javax.swing.JButton jButton4;
```

```
private javax.swing.JLabel jLabel1;
```

```
private javax.swing.JLabel jLabel2;  
private javax.swing.JLabel jLabel3;  
private javax.swing.JLabel jLabel4;  
private javax.swing.JScrollPane jScrollPane1;  
private javax.swing.JTable jTable1;  
private javax.swing.JTextField jTextField1;  
private javax.swing.JTextField jTextField2;  
private javax.swing.JTextField jTextField3;  
private javax.swing.JTextField jTextField4;  
// End of variables declaration  
}
```