Practical No 10

Aim :- Create, debug and execute program based on checkbox and table.

Theory :-

Checkbox - It is used to create a checkbox control, which contains a box that can be checked or unchecked by clicking on it.

Constructors : public Checkbox()
public Checkbox(String)
public Checkbox(String, boolean)

Table - Table class is part of java swing package and generally used to display or edit two-dimensional data

Constructor : JTable()
JTable(int rows, int cols)
JTable(Object[][] data, Object[] col)

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```
import java.awt.*;
import javax.swing.*;
import javax.swing.table.*;

public class Sample extends JPanel {

public Sample() {
init();
}

private void init() {
// test data
Object[] columns = new Object[] { "Select", "Name" };
Object[][] data = new Object[2][2];
data[0][0] = new Boolean(true);
data[0][1] = "Luke Skywalker";
data[1][0] = new Boolean(false);
data[1][1] = "Han Solo";
// data[1][0][0] = new Boolean(false);
// data[1][0][1] = "Srinath";

MyTableModel model = new MyTableModel(data, columns);
JTable table = new JTable(model);

table.getColumnModel().getColumn(0).setCellEditor(
new CheckBoxCellEditor());

JScrollPane tableScroller = new JScrollPane(table);

add(tableScroller);
}
```

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```
JScrollPane tableScroller = new JScrollPane(table);

add(tableScroller);
}

private class MyTableModel extends AbstractTableModel {

private Object[][] data;
private Object[] columns;

public MyTableModel(Object[][] data, Object[] columns) {
this.data = data;
this.columns = columns;
}

public Class getColumnClass(int columnIndex) {
return data[0][columnIndex].getClass();
}
public int getColumnCount() {
return columns.length;
}
public int getRowCount() {
return data.length;
}
public Object getValueAt(int rowIndex, int columnIndex) {
return data[rowIndex][columnIndex];
}


public boolean isCellEditable(int rowIndex, int columnIndex) {
```

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```
public Object getValueAt(int rowIndex, int columnIndex) {
return data[rowIndex][columnIndex];
}


public boolean isCellEditable(int rowIndex, int columnIndex) {
return (columnIndex == 0);
}
}

private class CheckBoxCellEditor
extends AbstractCellEditor
implements TableCellEditor {
protected JCheckBox checkBox;

public CheckBoxCellEditor() {
checkBox = new JCheckBox();
checkBox.setHorizontalAlignment(SwingConstants.CENTER);
checkBox.setBackground(Color.white);
}

public Component getTableCellEditorComponent(
JTable table,
Object value,
boolean isSelected,
int row,
int column) {

checkBox.setSelected(((Boolean) value).booleanValue());

Component c =
```

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```
Component c =
table.getDefaultRenderer(
String.class).getTableCellRendererComponent(
table,
value,
isSelected,
false,
row,
column);
if (c != null) {
checkBox.setBackground(c.getBackground());
}

return checkBox;
}
public Object getCellEditorValue() {
return Boolean.valueOf(checkBox.isSelected());
}
}

public static void main(String[] args) {
JFrame f = new JFrame();
f.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

Sample test = new Sample();

f.getContentPane().add(test);
f.setSize(350, 250);
f.show();
}
}
```

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C:\Windows\System32\cmd.exe - java Sample

```
F:\Bhavin\VIth Sem\IT501E - Advanced Java\Practicals\Practical No.10>javac Sample.java
Note: Sample.java uses or overrides a deprecated API.
Note: Recompile with -Xlint:deprecation for details.

F:\Bhavin\VIth Sem\IT501E - Advanced Java\Practicals\Practical No.10>java Sample
```

A	B
☑	Luke Skywalker
☐	Han Solo

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