

1.

19BCD7088

Write a JavaFX application that allows the user to choose insurance options. Use a ToggleGroup to allow the user to select only one of two 8 types—HMO (health maintenance organization) or PPO (preferred provider organization). Use CheckBoxes for dental insurance and vision insurance options; the user can select one option, both options, or neither option. As the user selects each option, display its name and price in a text field; the HMO costs \$200 per month, the PPO costs \$600 per month, the dental coverage adds \$75 per month, and the vision care adds \$20 per month. Save the application as FXInsurance.java.

```
import java.awt.*;

import java.awt.event.*;

import javax.swing.*;

class MyWindowAdapter extends WindowAdapter{

    public void windowClosing(WindowEvent we) {

        System.exit(0);

    }

}

class CheckMeListener implements ItemListener {

    JCheckBox hb,pb,db,vb;

    JTextField disp;

    public void itemStateChanged(ItemEvent e){

        Object source=e.getSource();

        int select=e.getStateChange();

        if(source==hb){

            if(select==ItemEvent.SELECTED){

                disp.setText("HMO costs $200 per month");

            }

            else{

                disp.setText("");

            }

        }

        else if(source==pb){
```

```

        if(select==ItemEvent.SELECTED){
            disp.setText("PPO costs $600 per month");
        }
        else{
            disp.setText("");
        }
    }
    else if(source==db){
        if(select==ItemEvent.SELECTED){
            disp.setText("dental coverage adds $75 per month");
        }
        else{
            disp.setText("");
        }
    }
    else if(source== vb){
        if(select==ItemEvent.SELECTED){
            disp.setText("vision care adds $20 per month");
        }
        else{
            disp.setText("");
        }
    }
    else{
        disp.setText("");
    }
}

}

public class FXInsurance{
    public static void main(String[] args) {

```

```

        CheckMeListener y=new CheckMeListener();

        JFrame f = new JFrame("Amount displayer");

        f.setSize(400,150);

        Panel p = new Panel();

        p.setLayout(new FlowLayout());

        y.hb=new JCheckBox("HMO");

        y.pb=new JCheckBox("PPO");

        y.db=new JCheckBox("Dental");

        y.vb=new JCheckBox("Vision");

        y.disp=new JTextField("displayer",20);

        ButtonGroup bg=new ButtonGroup();

            bg.add(y.hb);

            bg.add(y.pb);

            p.add(new JLabel("Select one type of insurance"));

            p.add(y.hb);

            p.add(y.pb);

            p.add(new JLabel("Select one or both or neither of them"));

            p.add(y.db);

            p.add(y.vb);

            p.add(y.disp);

            y.hb.addItemListener(y);

            y.pb.addItemListener(y);

            y.db.addItemListener(y);

            y.vb.addItemListener(y);

            f.add(p);

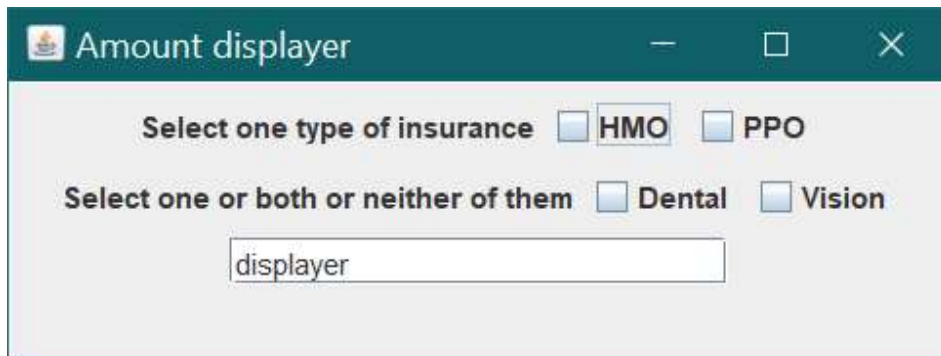
        f.addWindowListener(new MyWindowAdapter());

        f.setVisible(true);

    }

}

```



2.

Design a JavaFX application for the Sublime Sandwich Shop. The user makes sandwich order choices from list boxes, and the application displays the price. The user can choose from three main sandwich ingredients of your choice (for example, chicken) at three different prices. The user also can choose from three different bread types (for example, rye) from a list of at least three options.

Save the application as FXSandwich.java.

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

class MyWindowAdapter extends WindowAdapter{
    public void windowClosing(WindowEvent we) {
        System.exit(0);
    }
}

class Listener implements ListSelectionListener {
    int ing,bread;
    JList ingl,breads;
    JTextField total;
    public void valueChanged(ListSelectionEvent e){
        int indexing = ingl.getSelectedIndex();
        int indexbread = breads.getSelectedIndex();
        if(indexing==0){
            ing=200;
```

```

    }
    else if(indexing==1){
        ing=180;
    }
    else if(indexing==2){
        ing=118;
    }
    else{
        ing=0;
    }
    if(indexbread==0){
        bread=30;
    }
    else if(indexbread==1){
        bread=50;
    }
    else if(indexbread==2){
        bread=70;
    }
    else{
        bread=0;
    }
    double sum= ing+bread;
    total.setText("Total price $" +sum);
}

}

public class FXSandwich{
    public static void main(String[] args) {
        String Ingredients [] = {"Panner", "Mushroom", "Potato"};
        String breadTypes[] = {"Wheat", "Rye", "Brioche"};
    }
}

```

```

        Listener y = new Listener();
Frame f = new JFrame("Sublime Sandwich Shop");
f.setSize(350,160);
Panel p = new Panel();
p.setLayout(new FlowLayout());
y.total=new JTextField(15);
y.ingl = new JList<String>(Ingredients);
y.breads = new JList<String>(breadTypes);
p.add(new JLabel("Choose Ingredients"));
p.add(y.ingl);
p.add(new JLabel("Choose Bread"));
p.add(y.breads);
p.add(y.total);
y.ingl.addListSelectionListener(y);
y.breads.addListSelectionListener(y);
f.add(p);
f.addWindowListener(new MyWindowAdapter());
f.setVisible(true);
    }
}

```

