```java

import java.util.Scanner;
public class Debug1 {

        public static void main(String[] args) {
                // TODO Auto-generated method stub
                String name;
                int age;
                Scanner input = new Scanner(System.in);
                System.out.print("Please enter your age >> ");
                age = input.nextInt();
                // you need to swallow the dangling new line
                // this does not allow for the name = input.nextLine();
                // to work properly
                input.nextLine();
                System.out.print("Please Enter your name >> ");
                name = input.nextLine();
                System.out.println("Your name is " + name +
                                " and you are " + age + " years old");
        }

}
```

```java
// User selects pizza topping and sees price

// variables from camelCase changed to snake_case as well

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

public class Debug2 extends JFrame implements ActionListener{
        // moved all toppings to String array
        String toppings[] = {"cheese", "sausage", "pepperoni", "onion",
                        "green pepper", "green olive", "black olive"};
        // JComboBox needs to know what kind of elements it is holding
        // in this case it is Strings
        JComboBox<String> pizza_box = new JComboBox<>(toppings);

        // clearer variable names
        JLabel topping_label = new JLabel("Topping List");
        JLabel business_title = new JLabel("Paulos’s American Pie");

        JTextField total_price = new JTextField(20);

        int[] pizza_price = {7, 10, 10, 8, 8, 8, 8};
        int total, pizza_number;
        String output = "";

        // Constants that dictate how big the window will be

        final int FRAME_WIDTH = 500, FRAME_HEIGHT = 500;
        private static final long serialVersionUID = 12996;

        public Debug2(){
                super("Pizza Builder");

                setSize(FRAME_WIDTH, FRAME_HEIGHT);
                setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
                setLocationRelativeTo(null);
                setLayout(new FlowLayout());

                // the JComboBox needs to be linked to the actionPerformed method
                // added keyword this to indicate attachment to current class
                pizza_box.addActionListener(this);
                // add banner to main JFrame
                add(topping_label);
                // loop through the toppings String array for
                // less repetitive code
                for(int i = 0; i < toppings.length; ++i){
                      pizza_box.add(new JLabel(toppings[i]));
                }

                // add the rest of the elements to the main JFrame
                add(pizza_box);
                add(business_title);
                add(total_price);
        }

        // arguments changed to args but showed no discernable difference

        public static void main(String[] args){
                // call the correct constructor
                JFrame frame = new Debug2();
                // there is no need to set the size inside main
                // this is handled in the Debug2 constructor
                // also setVisible needs to be set to true
                frame.setVisible(true);
        }

   @Override
   // the original function had a itemStateChanged function
   // this was first misspelled and was not the correct function to call
   // you need to call actionPerformed, as it not a radio button
   // the parameters require an ActionEvent, not a list of ItemEvents

   public void actionPerformed(ActionEvent event){
        // you nee to call the function, getSource is not a data member
        // this is only permissible in Python
        Object source = event.getSource();
        // incorrect operator =
        if(source == pizza_box){
                // variable with similar name totalPrice and totPrice
                // totalPrice changed to given_price
                int given_price = pizza_price[pizza_box.getSelectedIndex()];
                // convert integer to String, then catenate
                output = "Pizza Price $ "+String.valueOf(given_price);
                total_price.setText(output);
        }
   }
}
```

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

// changed Debug -> Debug3
// file name must match class identifier

public class Debug3 extends JFrame implements ActionListener{

        private JButton next = new JButton("Next");
        private JButton prev = new JButton("Previous");
        private JPanel button_panel = new JPanel();
        // changed from JLabel -> JPanel, wrong object
        private JPanel button_panel2 = new JPanel();
        final int FRAME_HEIGHT = 500, FRAME_WIDTH = 500;

        // you need a CardLayout to allow for the show() method to work
        CardLayout card_layout = new CardLayout();

        public Debug3(){
                // clearer window name
                super("Card Layout Example Program");
                setLayout(card_layout);
                // from values before the constructor
                setSize(FRAME_HEIGHT, FRAME_WIDTH);
                setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

                // action listeners need to attach to the current JFrame

                next.addActionListener(this);
                prev.addActionListener(this);

                button_panel.setLayout(new FlowLayout());
                // an iterative solution to making the code more efficient
                for(int i = 1; i < 4; ++i){
                        button_panel.add(new JButton(String.valueOf(i)));
                }

                // add the button panel to the current JFrame
                // with correct name. They must match in the actionPerformed method

                this.add(button_panel, "Pane 1");

                button_panel2.setLayout(new GridLayout(2, 2, 5, 5));
                for(int i = 4; i < 7; ++i){
                        button_panel2.add(new JButton(String.valueOf(i)));
                }
```

```java
                // correct names for the buttons
                button_panel.add(next);
                button_panel2.add(prev);
                this.add(button_panel2, "Pane 2");

        }

        @Override
        public void actionPerformed(ActionEvent event) {
                // JButton -> Object
                // Object inherits any UI element so please use that
                Object source = event.getSource();
                // go forward
                if(source == next){ card_layout.show(getContentPane(), "Pane 2"); }
                // go backwards
                else if (source == prev){ card_layout.show(getContentPane(), "Pane 1"); }
        }

        public static void main(String[] args) {
                Debug3 frame = new Debug3();
                // make sure to set it to true, we need to see the GUI
                frame.setVisible(true);
        }

}
```