CAT C: JAVA SWING

C1-Write a program which takes name and age from the user on click of the button and display a message on label, user is eligible to vote or not.

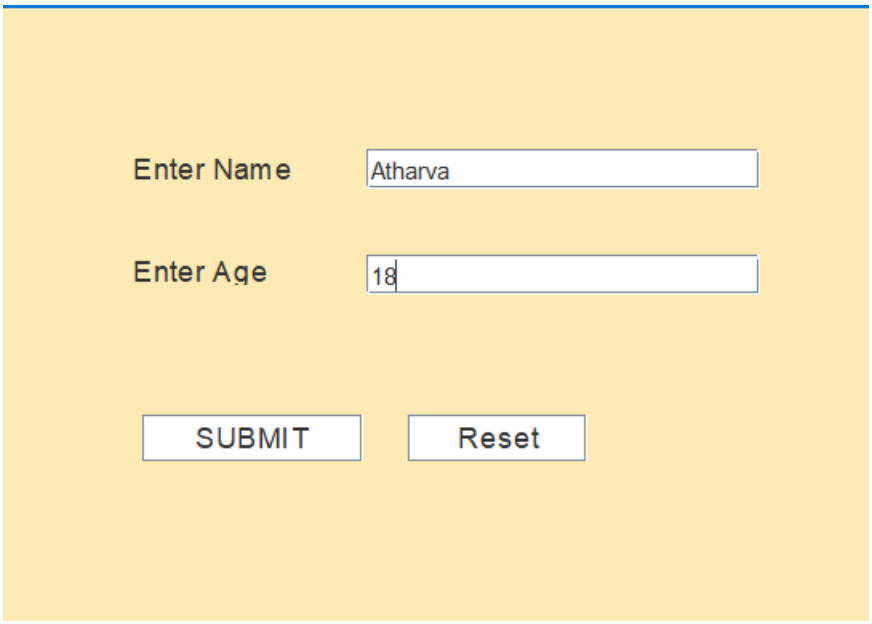
Code:

```
import java.awt.EventQueue;

import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.border.EmptyBorder;

import javax.swing.JLabel;

import javax.swing.JTextField;

import javax.swing.JButton;

import java.awt.Font;

import java.awt.Color;


public class Vote extends JFrame {


	private JPanel contentPane;

	private JTextField textField;

	private JTextField T2;


	/**

	 * Launch the application.

	 */

	public static void main(String[] args) {

		EventQueue.invokeLater(new Runnable() {

			public void run() {

				try {
```

```
                                Vote frame = new Vote();
                                frame.setVisible(true);
                            } catch (Exception e) {
                                e.printStackTrace();
                            }
                        }
                    });
}

/**
 * Create the frame.
 */
public Vote() {
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 450, 300);
        contentPane = new JPanel();
        contentPane.setBackground(Color.PINK);
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
        setContentPane(contentPane);
        contentPane.setLayout(null);

        JLabel lblNewLabel = new JLabel("Enter Name");
        lblNewLabel.setFont(new Font("Times New Roman", Font.BOLD, 12));
        lblNewLabel.setBounds(69, 73, 72, 17);
        contentPane.add(lblNewLabel);

        JLabel lblNewLabel_1 = new JLabel("Enter Age");
```

```
        lblNewLabel_1.setFont(new Font("Times New Roman", Font.BOLD, 12));
        lblNewLabel_1.setBounds(69, 125, 72, 14);
        contentPane.add(lblNewLabel_1);

        textField = new JTextField();
        textField.setBounds(186, 71, 86, 20);
        contentPane.add(textField);
        textField.setColumns(10);

        T2 = new JTextField();
        T2.setBounds(186, 122, 86, 20);
        contentPane.add(T2);
        T2.setColumns(10);

        JButton btnNewButton = new JButton("SUBMIT");
        btnNewButton.setBackground(Color.RED);
        btnNewButton.setBounds(63, 184, 89, 23);
        contentPane.add(btnNewButton);

        JButton T1 = new JButton("New button");
        T1.setBounds(183, 184, 89, 23);
        contentPane.add(T1);
    }
}
```

Output:



C2- Write a program to create two textfield and four radiobuttons (+,-,*,%)and on selecting the radiobutton the operation should be performed and result should be displayed in JOptionPane.

Code:

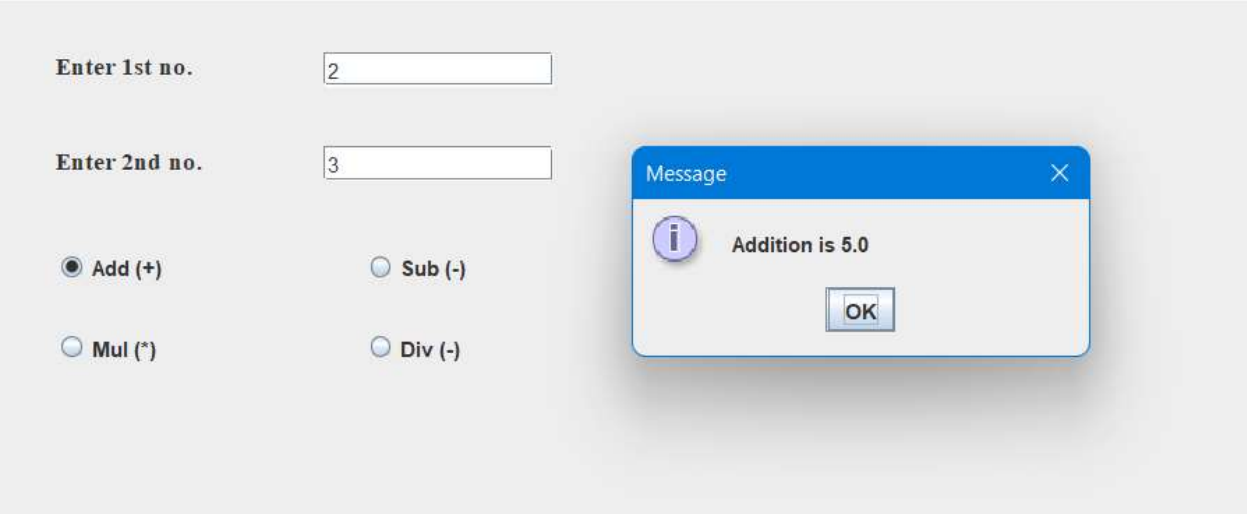
```
import java.awt.EventQueue;

import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.border.EmptyBorder;

import javax.swing.JTextField;

import javax.swing.JLabel;

import javax.swing.JOptionPane;

import javax.swing.JRadioButton;

import java.awt.Font;

import javax.swing.ButtonGroup;

import java.awt.event.ActionListener;

import java.awt.event.ActionEvent;
```

```
public class Operation extends JFrame {

	private JPanel contentPane;
	private JTextField l1;
	private JTextField l2;
	private final ButtonGroup buttonGroup = new ButtonGroup();

	double n1,n2;
	void input() {
		n1=Double.parseDouble(l1.getText());
		n2=Double.parseDouble(l2.getText());
	}

	/**
	 * Launch the application.
	 */
	public static void main(String[] args) {
		EventQueue.invokeLater(new Runnable() {
			public void run() {
				try {
					Operation frame = new Operation();
					frame.setVisible(true);
				} catch (Exception e) {
					e.printStackTrace();
				}
			}
```

```
        });
}

/**
 * Create the frame.
 */
public Operation() {
        setTitle("2nd _ Cal");
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 450, 300);
        contentPane = new JPanel();
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
        setContentPane(contentPane);
        contentPane.setLayout(null);

        l1 = new JTextField();
        l1.setBounds(186, 30, 132, 20);
        contentPane.add(l1);
        l1.setColumns(10);

        l2 = new JTextField();
        l2.setBounds(186, 84, 132, 20);
        contentPane.add(l2);
        l2.setColumns(10);

        JLabel lblNewLabel = new JLabel("Enter 1st no.");
        lblNewLabel.setFont(new Font("Times New Roman", Font.BOLD, 14));
```

```
lblNewLabel.setBounds(32, 30, 114, 17);
contentPane.add(lblNewLabel);

JLabel lblNewLabel_1 = new JLabel("Enter 2nd no.");
lblNewLabel_1.setFont(new Font("Times New Roman", Font.BOLD, 14));
lblNewLabel_1.setBounds(32, 84, 114, 17);
contentPane.add(lblNewLabel_1);

JRadioButton r2 = new JRadioButton("Sub (-)");
r2.addActionListener(new ActionListener() {
	public void actionPerformed(ActionEvent e) {
		input();
		JOptionPane.showMessageDialog(r2,"Subtraction is "+(n1-n2));
	}
});
buttonGroup.add(r2);
r2.setBounds(209, 142, 109, 23);
contentPane.add(r2);

JRadioButton r4 = new JRadioButton("Div (-)");
r4.addActionListener(new ActionListener() {
	public void actionPerformed(ActionEvent e) {
		input();
		JOptionPane.showMessageDialog(r4,"Division is "+(n1/n2));
	}
});
buttonGroup.add(r4);
```

```
		r4.setBounds(209, 188, 109, 23);
		contentPane.add(r4);

		JRadioButton r1 = new JRadioButton("Add (+)");
		r1.addActionListener(new ActionListener() {
			public void actionPerformed(ActionEvent e) {
				input();
				JOptionPane.showMessageDialog(r1,"Addition is "+(n1+n2));
			}
		});
		buttonGroup.add(r1);
		r1.setBounds(32, 142, 109, 23);
		contentPane.add(r1);

		JRadioButton r3 = new JRadioButton("Mul (*)");
		r3.addActionListener(new ActionListener() {
			public void actionPerformed(ActionEvent e) {
				input();
				JOptionPane.showMessageDialog(r3,"Multiplication is "+(n1*n2));
			}
		});
		buttonGroup.add(r3);
		r3.setBounds(32, 188, 109, 23);
		contentPane.add(r3);
	}
}
```



C3- Write a program that creates a list containing ice-cream flavours. On selection of any flavour price should be displayed in text field.

Code:

```
import java.awt.EventQueue;

import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.border.EmptyBorder;

import javax.swing.JList;

import javax.swing.AbstractListModel;

import javax.swing.JTextField;

import javax.swing.ListSelectionModel;

import javax.swing.event.ListSelectionListener;

import javax.swing.event.ListSelectionEvent;


public class IceCream extends JFrame {


	private JPanel contentPane;

	private JTextField t1;
```

```
/**
 * Launch the application.
 */
public static void main(String[] args) {
	EventQueue.invokeLater(new Runnable() {
		public void run() {
			try {
				IceCream frame = new IceCream();
				frame.setVisible(true);
			} catch (Exception e) {
				e.printStackTrace();
			}
		}
	});
}

/**
 * Create the frame.
 */
public IceCream() {
	setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
	setBounds(100, 100, 450, 300);
	contentPane = new JPanel();
	contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
	setContentPane(contentPane);
	contentPane.setLayout(null);
```

```
JList list = new JList();
list.addListSelectionListener(new ListSelectionListener() {
	public void valueChanged(ListSelectionEvent e) {
		int i=list.getSelectedIndex();
		if(i==1) {
			t1.setText("Price of "+list.getSelectedValue()+" is 20");

		}

		else if(i==2) {
			t1.setText("Price of "+list.getSelectedValue()+" is 30");

		}

		else if(i==3 ) {
			t1.setText("Price of "+list.getSelectedValue()+" is 30");
		}

		else if(i==4) {
			t1.setText("Price of "+list.getSelectedValue()+" is 40");
		}
	}
});
list.setSelectionMode(ListSelectionModel.SINGLE_INTERVAL_SELECTION);
list.setModel(new AbstractListModel() {
```

```
                String[] values = new String[] {"Select your flavour", "Vanilla",
"Strawberry", "Chocolate", "Mango"};
                public int getSize() {
                        return values.length;
                }
                public Object getElementAt(int index) {
                        return values[index];
                }
        });
        list.setBounds(34, 11, 214, 142);
        contentPane.add(list);

        t1 = new JTextField();
        t1.setEditable(false);
        t1.setBounds(34, 187, 254, 29);
        contentPane.add(t1);
        t1.setColumns(10);
    }
}
```

Output:

C4- Write a program to create a Combobox, textfield and button and on click of button the value of textfield should be added to combobox.

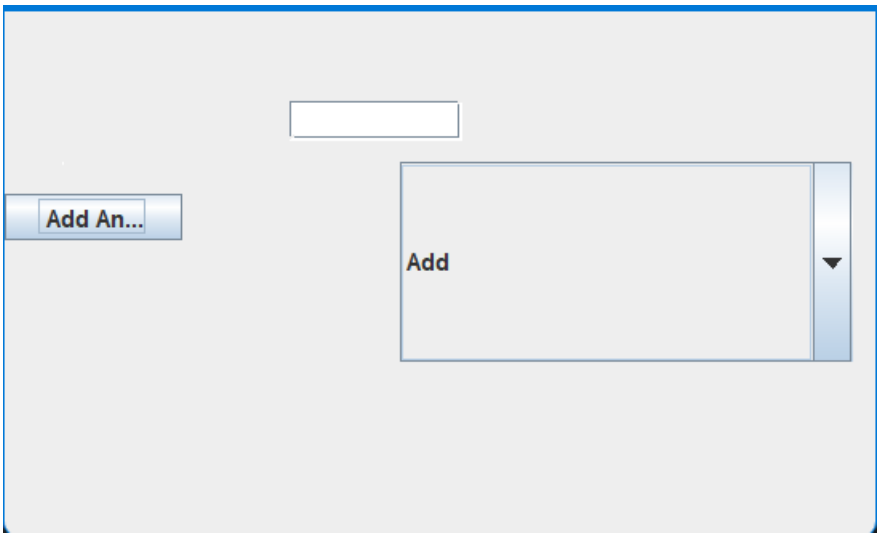
Code:

```
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JComboBox;
import javax.swing.JTextField;
import javax.swing.JButton;
import javax.swing.JList;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;

public class ComboBox extends JFrame {

	private JPanel contentPane;
	private JTextField t1;

	/**
	 * Launch the application.
	 */
	public static void main(String[] args) {
		EventQueue.invokeLater(new Runnable() {
			public void run() {
				try {
					ComboBox frame = new ComboBox();
```

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

/**
 * Create the frame.
 */

public ComboBox() {
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 450, 300);
        contentPane = new JPanel();
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
        setContentPane(contentPane);
        contentPane.setLayout(null);

        JComboBox jc1 = new JComboBox();
        jc1.setBounds(198, 76, 226, 100);
        contentPane.add(jc1);

        t1 = new JTextField();
        t1.setText("Add");
```

```
                t1.setBounds(143, 45, 86, 20);
                contentPane.add(t1);
                t1.setColumns(10);

                JList list = new JList();
                list.setBounds(29, 76, 1, 1);
                contentPane.add(list);

                JButton b1 = new JButton(" Add Anything");
                b1.addActionListener(new ActionListener() {
                        public void actionPerformed(ActionEvent e) {
                                jc1.addItem(t1.getText());
                                t1.setText("");
                        }
                });
                b1.setBounds(0, 92, 89, 23);
                contentPane.add(b1);
        }
}
```

Output:



C5- Create an application where user can place order for pizza. Accept user-name, address, mobile- no from user. Give options for 4 types of pizza (basic, thick & chewy, thin & crispy, Chicago deep dish). Also provide options for multiple toppings (Pepperoni, sausage, black olives, and mushrooms). Confirm the order by displaying all the details in a JOptionPane.

Code:

```
import java.awt.EventQueue;

import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.border.EmptyBorder;

import javax.swing.JLabel;

import javax.swing.JTextField;

import javax.swing.JTextArea;

import javax.swing.JComboBox;

import javax.swing.DefaultComboBoxModel;

import javax.swing.JList;

import javax.swing.JOptionPane;

import javax.swing.AbstractListModel;

import javax.swing.JButton;
```

```
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;

public class Pizza extends JFrame {

	private JPanel contentPane;

	JTextField t1;
	JTextArea t2;
	JTextField t3;
	JComboBox t4;
	JList t5;

	/**
	 * Launch the application.
	 */
	public static void main(String[] args) {
		EventQueue.invokeLater(new Runnable() {
			public void run() {
				try {
					Pizza frame = new Pizza();
					frame.setVisible(true);
				} catch (Exception e) {
					e.printStackTrace();
				}
			}
		});
```

```
}

/**
 * Create the frame.
 */
public Pizza() {
	setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
	setBounds(100, 100, 450, 300);
	contentPane = new JPanel();
	contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
	setContentPane(contentPane);
	contentPane.setLayout(null);

	JLabel l1 = new JLabel("User Name : ");
	l1.setBounds(10, 11, 141, 26);
	contentPane.add(l1);

	JLabel l2 = new JLabel("Address : ");
	l2.setBounds(8, 48, 116, 26);
	contentPane.add(l2);

	JLabel l3 = new JLabel("Mobile No. : ");
	l3.setBounds(10, 102, 100, 34);
	contentPane.add(l3);

	JLabel l4 = new JLabel("Base :");
	l4.setBounds(10, 144, 60, 26);
```

```
        contentPane.add(l4);

        JLabel l5 = new JLabel("Topping : ");
        l5.setBounds(10, 181, 62, 26);
        contentPane.add(l5);

        t1 = new JTextField();
        t1.setBounds(80, 14, 233, 20);
        contentPane.add(t1);
        t1.setColumns(10);

        t2 = new JTextArea();
        t2.setBounds(80, 49, 261, 52);
        contentPane.add(t2);

        t3 = new JTextField();
        t3.setBounds(81, 109, 260, 20);
        contentPane.add(t3);
        t3.setColumns(10);

        t4 = new JComboBox();
        t4.setModel(new DefaultComboBoxModel(new String[] {"Select your Pizza Base",
"Basic ", "Thick & Chewy", "Thin & Crispy", "Chicago Deep Dish"}));
        t4.setBounds(80, 140, 261, 20);
        contentPane.add(t4);

    t5 = new JList();
```

```
t5.setModel(new AbstractListModel() {
        String[] values = new String[] {"Select your Pizza Toppings", "Pepperoni",
"Sausage", "Black Olives", "Mushrooms"};
        public int getSize() {
                return values.length;
        }
        public Object getElementAt(int index) {
                return values[index];
        }
});
t5.setBounds(82, 163, 261, 64);
contentPane.add(t5);

JButton btnNewButton = new JButton("Reset");
btnNewButton.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
                t1.setText("");
      t2.setText("");
                t3.setText("");
                t4.setSelectedIndex(0);
                t5.setSelectedIndex(0);                    }
});
btnNewButton.setBounds(10, 227, 89, 23);
contentPane.add(btnNewButton);



JButton b3 = new JButton("Order");
```

```
            b3.addActionListener(new ActionListener() {
                public void actionPerformed(ActionEvent e) {
                    String msg=t1.getText()+"Your details are: \n";
                    msg += "Address: "+t2.getText()+"\n Mobile: "+t2.getText();
                    msg += "\n pizza Base: "+t4.getSelectedItem();
                    String str=" ";
                    Object obj[]=t5.getSelectedValues();
                    for(int i=0;i<obj.length;i++)
                        str+=obj[i]+",";
                    msg+="\n Toppings: "+str+"\n Your Order will reach soon.....";
                    JOptionPane.showMessageDialog(b3,msg);
                }
            });
            b3.setBounds(124, 227, 89, 23);
            contentPane.add(b3);
        }
}
```

Output: