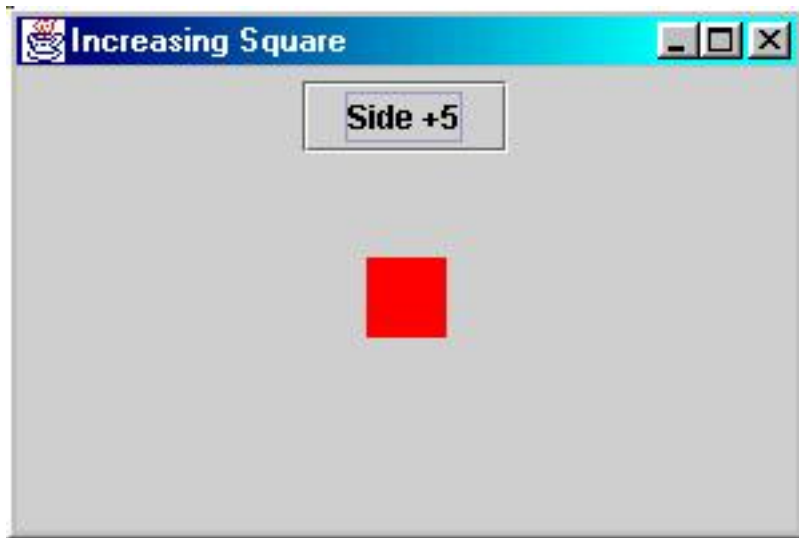**Click Count Frame**

Count= 7   +1   -1

Question 1: Consider the following program.

```
1. class ClickCountPanel extends JPanel {
2.    private int count;
3.    private JLabel label;
4.
5.    public ClickCountPanel() {
6.       label=new JLabel("No click yet");
7.       add(label);
8.       JButton plusButton=new JButton("+1");
9.       plusButton.addActionListener(new ActionListener(){
10.         public void actionPerformed(ActionEvent event){
11.            count++;
12.            label.setText("Count= "+count);
13.         }
14.      });
15.      add(plusButton);
16.      JButton minusButton=new JButton("-1");
17.      minusButton.addActionListener(new ActionListener(){
18.         public void actionPerformed(ActionEvent event){
19.            count--;
20.            label.setText("Count= "+count);
21.         }
22.      });
23.      add(minusButton);
24.   }
25.}
```

a) What is the initial label on the panel?

b) What happens if one clicks on the ”+1” button? (which method is called? What is the effect on variables and on the frame?)

c) There are two anonymous inner classes in this code. Modify the code to use two inner classes CountPlusListener and CountMinusListener instead.

d) Modify the code to use only one inner class : CountListener that works for the two buttons.

Question 2: We want to create a frame with a red square in it and a button to increase the side of the square.

a) Write a class `IncreasingSquareFrame`. An `IncreasingSquareFrame` has a panel inside. The panel must be of the class `IncreasingSquarePanel`. Also write a main to run your program.

b) Declare the class `IncreasingSquarePanel` with one private field `side` to store the size of the side of the square.

c) Write the `paintComponent(Graphics g)` method of the class `IncreasingSquarePanel` that draws a square with the given `side`.

d) Enhance the `paintComponent` method to put the square in red and in the center of the `IncreasingSquarePanel`.

e) Here is the constructor for the class `IncreasingSquarePanel()`:

```
public IncreasingSquarePanel(){
   side=20; //initial value of the side of the square
   JButton increasingButton = new JButton("side + 5");
   increasingButton.addActionListener(new IncreasingSquareListener());
   add(increasingButton);
}
```

Write the **inner class** `IncreasingSquareListener` that adds 5 to the side each time the button is clicked.

Good Luck !!