

1)

```
public class LibyaPanel extends JPanel{
    public LibyaPanel() {
        //panel
        setSize(500,300);
        setBackground(Color.green);
    }
    public static void main(String[] args){
        JFrame frame = new JFrame("Libya");
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setSize(500, 300);
        frame.setLocation(400, 300);
        frame.add(new LibyaPanel());
        frame.setVisible(true);
    }
}
```

2)

```
public class FrancePanel extends JPanel{
    public FrancePanel() {
        //containerpanel for color-panels
        setSize(500, 300);
        setLayout(new BorderLayout());

        JPanel bluePanel = new JPanel();
        bluePanel.setBackground(Color.blue);
        JPanel whitePanel = new JPanel();
        whitePanel.setBackground(Color.white);
        JPanel redPanel = new JPanel();
        redPanel.setBackground(Color.red);

        add(bluePanel, BorderLayout.WEST);
        add(whitePanel, BorderLayout.CENTER);
        add(redPanel, BorderLayout.EAST);
    }
    public static void main(String[] args){
        JFrame frame = new JFrame("France");
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setSize(500, 300);
        frame.setLocation(400, 300);
        frame.add(new FrancePanel());
        frame.setVisible(true);
    }
}
```

```
}
```

3)

```
public class PanamaPanel extends JPanel{
    public PanamaPanel() {
        setSize(500,300);
        setLayout(new GridLayout(2,2));

        JPanel whitePanel = new JPanel();
        whitePanel.setBackground(Color.white);
        JPanel redPanel = new JPanel();
        redPanel.setBackground(Color.red);
        JPanel bluePanel = new JPanel();
        bluePanel.setBackground(Color.blue);
        JPanel whitePanel2 = new JPanel();
        whitePanel2.setBackground(Color.white);

        add(whitePanel);
        add(redPanel);
        add(bluePanel);
        add(whitePanel2);
    }
    public static void main(String[] args){
        JFrame frame = new JFrame("Panama");
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setSize(500, 300);
        frame.setLocation(400, 300);
        frame.add(new PanamaPanel());
        frame.setVisible(true);
    }
}
```

4)

```
public class ColorChanger extends JFrame implements ActionListener{
    private JPanel colorPanel;
    private JButton redButton, blueButton, yellowButton;
    public ColorChanger(String title){
        setTitle(title);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setSize(800, 600);
        setLocation(100, 100);

        //container
```

```
JPanel container = new JPanel();
container.setLayout(new BorderLayout());

//colorpanel
colorPanel = new JPanel();
colorPanel.setBackground(Color.white);

//buttonpanel
JPanel buttonPanel = new JPanel();
redButton = new JButton("RED");
redButton.addActionListener(this);
blueButton = new JButton("BLUE");
blueButton.addActionListener(this);
yellowButton = new JButton("YELLOW");
yellowButton.addActionListener(this);
buttonPanel.add(redButton);
buttonPanel.add(blueButton);
buttonPanel.add(yellowButton);

//adding swing-elements
container.add(colorPanel, BorderLayout.CENTER);
container.add(buttonPanel, BorderLayout.SOUTH);
add(container);

setVisible(true);
}

@Override
public void actionPerformed(ActionEvent e) {
    if(e.getSource()==redButton){
        colorPanel.setBackground(Color.red);
    }
    if(e.getSource()==blueButton){
        colorPanel.setBackground(Color.blue);
    }
    if(e.getSource()==yellowButton){
        colorPanel.setBackground(Color.yellow);
    }
}

public static void main(String[] args){
    new ColorChanger("Färgknappar");
}
```

```
}
```

5)

```
public class FlagChanger extends JFrame implements ActionListener{
    private JPanel flagPanel, buttonPanel;
    private JButton libyaButton, franceButton, panamaButton;
    public FlagChanger(String title){
        setTitle(title);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setSize(500, 400);
        setLocation(100, 100);

        //container
        JPanel container = new JPanel();
        container.setLayout(new BorderLayout());

        //colorpanel
        flagPanel = new JPanel();
        flagPanel.setSize(500,300);

        //buttonpanel
        buttonPanel = new JPanel();
        buttonPanel.setSize(500,100);
        libyaButton = new JButton("LIBYA");
        libyaButton.addActionListener(this);
        franceButton = new JButton("FRANCE");
        franceButton.addActionListener(this);
        panamaButton = new JButton("PANAMA");
        panamaButton.addActionListener(this);
        buttonPanel.add(libyaButton);
        buttonPanel.add(franceButton);
        buttonPanel.add(panamaButton);

        container.add(flagPanel, BorderLayout.CENTER);
        container.add(buttonPanel, BorderLayout.SOUTH);
        add(container);
        setVisible(true);
    }

    @Override
    public void actionPerformed(ActionEvent e) {
        flagPanel.removeAll();
    }
}
```

```
        flagPanel.revalidate();
        if(e.getSource()==libyaButton){
            flagPanel.add(new LibyaPanel());
            System.out.println("libya");
        }
        else if(e.getSource()==franceButton){
            flagPanel.add(new FrancePanel());
            System.out.println("france");
        }
        else if(e.getSource()==panamaButton){
            flagPanel.add(new PanamaPanel());
            System.out.println("panama");
        }
        repaint();
    }

    public static void main(String[] args){
        new FlagChanger("Färgknappar");
    }
}
```