

Synchronized void put(int n)

```
{ while (valueSet)
{
    try
    {
        System.out.println("\n producer
        waiting \n");
        wait();
    }
    catch (InterruptedException caught) {}
}
```

this.n = n;

valueSet = true;

System.out.println("Put: " + n);

System.out.println("Intimate consumer");
notify();

class producer implements Runnable

{

Q q;

producer(Q q)

{ this.q = q

new Thread(this, "Producers").start();

{

public void run()

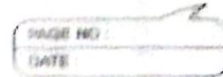
{

int i = 0;

while (i < 15)

{ q.put(i + 1);

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LAB-9

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

```
class SwingDemo
{
```

```
    SwingDemo()
```

```
{
```

```
    JFrame jfrm = new JFrame("Divder App");
```

```
    jfrm.setSize(275, 150);
```

```
    jfrm.setLayout(new FlowLayout());
```

```
    jfrm.setDefaultCloseOperation(JFrame.  
                                ExitOn  
                                Close);
```

```
    JLabel jlab = new JLabel("Enter the  
                             dividers and  
                             dividend:");
```

```
    JTextField ajtf = new JTextField(8);
```

```
    JTextField bjtf = new JTextField(8);
```

```
    JButton button = new JButton("Calculate");
```

```
    JLabel err = new JLabel();
```

```
    JLabel alab = new JLabel();
```

```
    JLabel blab = new JLabel();
```

```
    JLabel ansLab = new JLabel();
```

```
    // add in order.
```

```
    jfrm.add(err);
```

```
    jfrm.add(jlab);
```

```
    jfrm.add(ajtf);
```

```
    jfrm.add(bjtf);
```

```
    jfrm.add(button);
```

```
    jfrm.add(alab);
```

```
    jfrm.add(blab);
```

```
    jfrm.add(ansLab);
```



```
ActionListener 1 = new ActionListener {
```

```
    public void actionPerformed (ActionEvent evt) {
```

```
        System.out.println("Action event from a text field");
```

```
    }
```

```
ajtf.addActionListener(1);
```

```
bjtf.addActionListener(1);
```

```
button.addActionListener(new ActionListener {
```

```
    public void actionPerformed (ActionEvent evt) {
```

```
        try {
```

```
            int a = Integer.parseInt(ajtf.getText());
```

```
            int b = Integer.parseInt(bjtf.getText());
```

```
            int ans = a/b;
```

```
            alab.setText("1nA = " + a);
```

```
            blab.setText("1nB = " + b);
```

```
            anslab.setText("1nAns = " + ans);
```

```
        }
```

catch (NumberFormatException e) {

```

    aLab.setText("");
    bLab.setText("");
    ansLab.setText("");
    err.setText("Enter only integers!");
}

```

catch (ArithmeticException e) {

```

    aLab.setText("");
    bLab.setText("");
    ansLab.setText("");
    err.setText("B should be NON Zero!");
}

```

}

}

}

jfrm.setVisible(true);

}

public static void main (String args[])

{

SwingUtilities.invokeLater (new Runnable()

{

public void run()

{

new SwingDemo();

}

}

}

output:-

Enter only Integer

Enter divider & dividend

calculate	

Enter only Integer

enter divider & dividend

10	5
calculate	

A=10 B=5 Ans=2