

Step-6: Set the JFrame size and set setVisible(true) to make JTabbedPane visible.

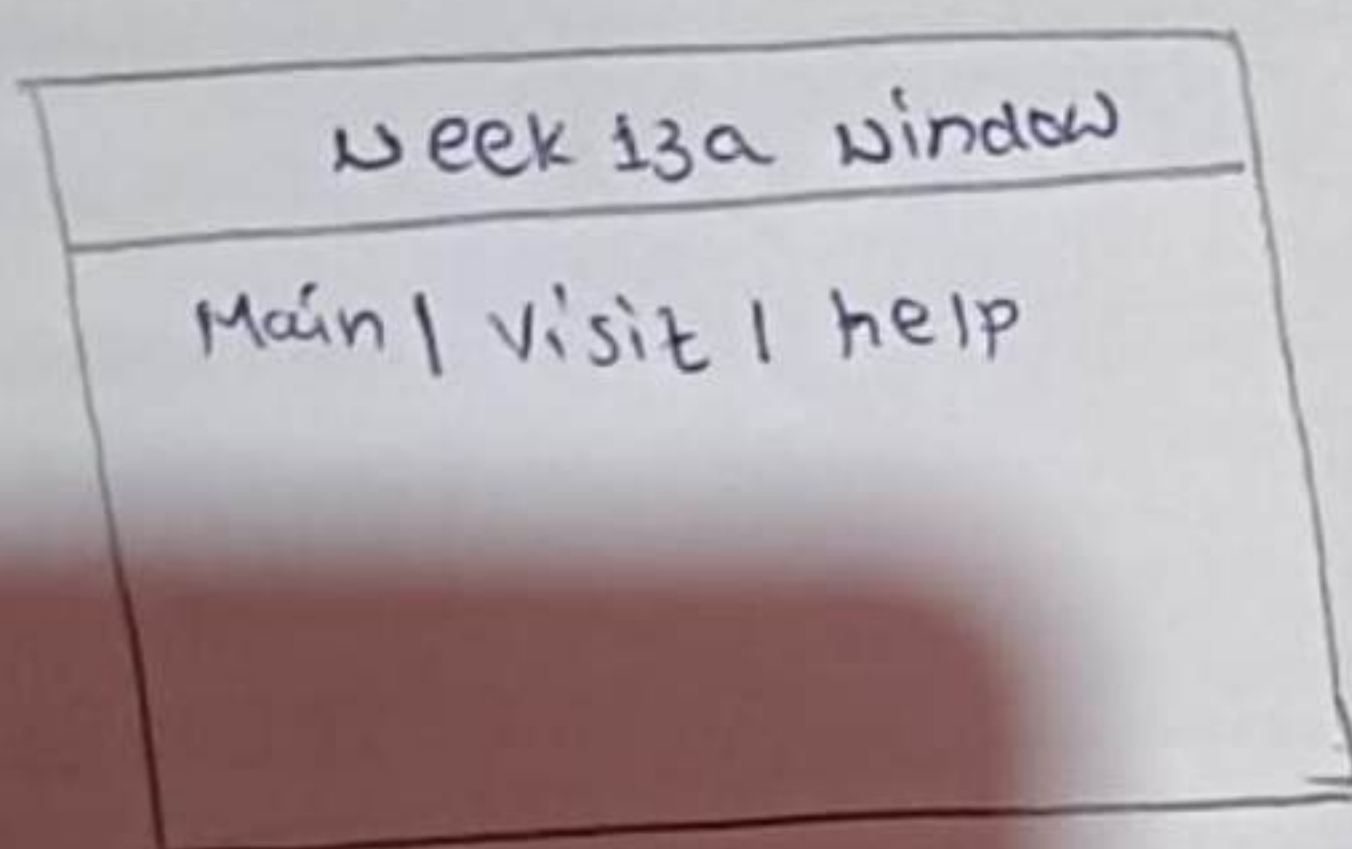
Step-7: END

SOURCE CODE

```
import javax.swing.*;

public class Week13a {
    JFrame f;
    Week13a() {
        f = new JFrame();
        JTextArea ta = new JTextArea(200, 200);
        JPanel p1 = new JPanel();
        p1.add(ta);
        JPanel p2 = new JPanel();
        JPanel p3 = new JPanel();
        JTabbedPane tp = new JTabbedPane();
        tp.setBounds(50, 50, 200, 200);
        tp.add("main", p1);
        tp.add("visit", p2);
        tp.add("help", p3);
        f.add(tp);
        f.setSize(400, 400);
        f.setLayout(null);
        f.setVisible(true);
        f.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    }
    public static void main(String[] args) {
        new Week13a();
    }
}
```


OUTPUT



2. JScrollPane

ALGORITHM

Step-1: START

Step-2: Create a Panel and set panel Layout to the GridLayout.

Step-3: Create array of buttons and add them to the Panel.

Step-4: Create horizontal and vertical ScrollPaneConstants.

Step-5: Create a JScrollPane and set panel, horizontal and vertical ScrollPaneConstants.

Step-6: Get the contentPane object and add the JScrollPane object to it with required layout.

Step-7: END

SOURCE CODE

```

import javax.swing.*;
import java.awt.BorderLayout;

public class Week13b1
{
    public static void main(String[] args) {
        JFrame frame = new JFrame("JScrollPane Example");
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setSize(400, 300);
        JTextArea textArea = new JTextArea(20, 40);
        textArea.setText("This is a JTextArea inside a JScrollPane. \n".repeat(5));
        JScrollPane scrollpane = new JScrollPane(textArea);
        frame.add(scrollpane);
        frame.setVisible(true);
    }
}

```


OUTPUT

JScrollPane Example

This is a JTextArea inside a JScrollPane

This is a JTextArea inside a JScrollPane

This is a JTextArea inside JScrollPane

This is a JTextArea inside JScrollPane

This is a JTextArea inside JScrollPane