```
File
New
Java Project
Insert Name for eg abc
Don't Create Module
Right Click on the Project
Select New Class
Insert Name
import javax.swing.JFrame;
import javax.swing.SwingUtilities;
public class abc {
public static void main(String[] args) {
      SwingUtilities.invokeLater(new Runnable() {
             public void run() {
      JFrame frame = new JFrame("Hello world swing");
      frame.setVisible(true);
      frame.setSize(500, 500);
      frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
      }
});
}

#Creating MainFrame
Click on right button to Jframe
Insert new Class by naming MainFrame
Brows to Jframe
import java.awt.BorderLayout;
import java.awt.Container;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JTextArea;
```

```
public class MainFrame extends JFrame {
      public MainFrame(String title) {
             super(title);
             // Set layout Manager
             setLayout(new BorderLayout());
             //Create Swing component
             JTextArea textArea = new JTextArea();
             JButton button = new JButton("Click me");
             //Add Swing components to content pane
             Container c = getContentPane();
             c.add(textArea, BorderLayout.CENTER);
             c.add(button, BorderLayout.SOUTH);
             //Add behavior
             button.addActionListener(new ActionListener() {
                    @Override
                    public void actionPerformed(ActionEvent e) {
                          // TODO Auto-generated method stub
                          textArea.append("Hello");
                    }
             });
      }
}
# To Create Panel Right Click on Panel
Create a new class
By naming PanelDetails
Brows to Panel
Additional changes to Main Frame
import java.awt.BorderLayout;
import java.awt.Container;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
```

```
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JTextArea;
public class MainFrame extends JFrame {
      private DetailsPanel detailsPanel;
      public MainFrame(String title) {
             super(title);
             // Set layout Manager
             setLayout(new BorderLayout());
             //Create Swing component
             JTextArea textArea = new JTextArea();
             JButton button = new JButton("Click me");
             detailsPanel = new DetailsPanel();
             //Add Swing components to content pane
             Container c = getContentPane();
             c.add(textArea, BorderLayout.CENTER);
             c.add(button, BorderLayout.SOUTH);
             c.add(detailsPanel, BorderLayout.WEST);
             //Add behavior
             button.addActionListener(new ActionListener() {
                    @Override
                    public void actionPerformed(ActionEvent e) {
                          // TODO Auto-generated method stub
                          textArea.append("Hello");
                    }
             });
      }
}
# In Panel Class
import java.awt.Dimension;
import java.awt.GridBagConstraints;
import java.awt.GridBagLayout;
import java.awt.Panel;
import javax.swing.JButton;
import javax.swing.JLabel;
import javax.swing.JTextField;
```

```
public class DetailsPanel extends Panel {
    public DetailsPanel() {
        Dimension size = getPreferredSize();
        size.width = 200;
        setPreferredSize(size);
        JLabel nameLabel = new JLabel("Name:");
        JLabel occupationalLabel = new JLabel("Occupation:");
        JTextField nameField = new JTextField(10);
        JTextField occupationalField = new JTextField(10);
        JButton addBtn = new JButton("Add");
        setLayout(new GridBagLayout());
        GridBagConstraints gc = new GridBagConstraints();
    }
}
```

GridBag Constraints

```
// First column//
      gc.anchor = GridBagConstraints.LAST LINE END;
      gc.weightx = 0.5;
      gc.weighty = 0.5;
      gc.gridx = 0;
      gc.gridy = 0;
      add(nameLabel, gc);
      gc.gridx = 0;
      gc.gridy = 1;
      add(occupationalLabel, gc);
      // Second Column
      gc.anchor = GridBagConstraints.LAST_LINE_START;
      gc.gridx = 1;
      gc.gridy = 0;
      add(nameField, gc);
      gc.gridx = 1;
      gc.gridy = 1;
      add(occupationalField, gc);
      // Final row
      gc.weightx = 10;
      gc.anchor = GridBagConstraints.FIRST_LINE_START;
      gc.gridx = 1;
```

```
gc.gridy = 2;
add(addBtn, gc);
```