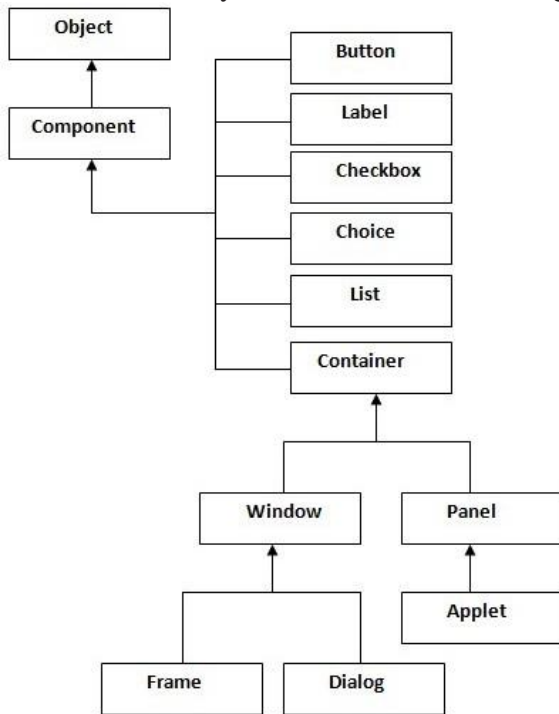


JAVA AWT HIERARCHY

The hierarchy of Java AWT classes are given below.



Container

The Container is a component in AWT that can contain another component like buttons, textfields, labels etc. The classes that extend Container class are known as container such as Frame, Dialog and Panel.

Window

The window is the container that has no borders and menu bars. You must use frame, dialog or another window for creating a window.

Panel

The Panel is the container that doesn't contain title bar and menu bars. It can have other components like button, textfield etc.

Frame

The Frame is the container that contain title bar and can have menu bars. It can have other components like button, textfield etc.

The following table gives the methods of Component class:

Method	Description
public void add(Component c)	inserts a component on this component.

public void setSize(int width,int height)	sets the size (width and height) of the component.
public void setLayout(Layout Manager m)	defines the layout manager for the component.
public void setVisible(boolean status)	changes the visibility of the component, by default false.

The following programs are the examples of Java AWT:

To create simple awt program, we need to create a frame. There are two ways to create a frame in AWT.

- By extending Frame class (inheritance)
- By creating the object of Frame class (association)

Example program using by extending Frame class (inheritance)

```
import java.awt.*;
class First extends Frame{
First(){
Button b=new Button("click me");
b.setBounds(30,100,80,30);// setting button position
add(b);//adding button into frame
setSize(300,300);//frame size 300 width and 300 height
setLayout(null);//no layout manager
setVisible(true);//now frame will be visible, by default not visible
}
public static void main(String args[]){
First f=new First();
}}
```



Example program using by creating the object of Frame class (association)

```
import java.awt.*;
class First2{
```

```
First2(){  
    Frame f=new Frame();  
    Button b=new Button("click me");  
    b.setBounds(30,50,80,30); f.add(b);  
    f.setSize(300,300);  
    f.setLayout(null);  
    f.setVisible(true);  
}  
public static void main(String args[]){  
    First2 f=new First2();  
}  
}
```

