More Program Examples

- Short Version
  - JOptionPane.showMessageDialog(null, "I like Rota");
- If you prefer you may combine multiple class files into one class file, see Slide 4
  - main method is where the program execution starts
  - main method can be placed anywhere in file
- Creating multiple objects of a class, see Slide 6

 1

Creating Dialog Boxes

- Use JOptionPane Class
  - Call showMessageDialog Method
- `JOptionPane.showMessageDialog(null, "I like Saipan","Good Beaches",icon);`
  - 1st Argument null positions dialog box in center
  - 2nd Argument specifies message to display in box
  - 3rd Argument specifies the box title in title bar
  - 4th Argument specifies the icon to be displayed

JOptionPane.WARNING_MESSAGE

JOptionPane.QUESTION_MESSAGE

JOptionPane.INFORMATION_MESSAGE

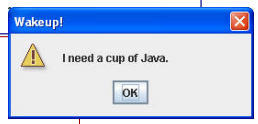
JOptionPane.ERROR_MESSAGE

JOptionPane.PLAIN_MESSAGE

 2

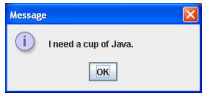
```
import javax.swing.*;
public class ShowBoxCls
{
  private String sMessage;
  ShowBoxCls()
  {
    sMessage = "I need a cup of Java.";
  }
  public void displayMessage()
  {
    JOptionPane.showMessageDialog(null,sMessage,
   "Wakeup!",JOptionPane.WARNING_MESSAGE);
  }
}
```

```
public class ShowBoxPrg
{
  public static void main(String[] args)
  {
    // Create a variable of type ShowMessageCls
      ShowBoxCls oMessageOne;
    // Create an object of the ShowMessageCls
      oMessageOne = new ShowBoxCls();
    // Call the method for the object
      oMessageOne.displayMessage();
      System.exit(0);
  }
}
```



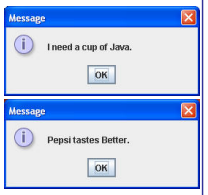

```
/* Show Box Program 2 - All methods in one file
 * Author: Robert Laurie
 */
import javax.swing.*;
public class ShowBox2
{
  // Data declaration section
  private String sMessage;

  // Methods definition section
  ShowBox2() // Constructor
  {
    sMessage = "I need a cup of Java.";
  }
  public void displayMessage()
  {
    JOptionPane.showMessageDialog(null,sMessage);
  }
  public static void main(String[] args)
  {
    // Create a variable of type ShowMessage
      ShowBox2 oMessageOne;
    // Create an object of the ShowMessage
      oMessageOne = new ShowBox2();
    // Call the method for the object
      oMessageOne.displayMessage();
      System.exit(0);
  }
}
```



```
/* Show Box Program 3 - Change the Message
 * Author: Robert Laurie
 */
import javax.swing.*;
public class ShowBox3
{
  // Data declaration section
  private String sMessage;

  // Methods definition section
  ShowBox3() // Constructor
  {
    sMessage = "I need a cup of Java.";
  }
  public void displayMessage()
  {
    JOptionPane.showMessageDialog(null,sMessage);
  }
  public void changeMessage(String sNewMsg)
  {
    sMessage = sNewMsg;
  }
  public static void main(String[] args)
  {
      ShowBox3 oMessageOne;
      oMessageOne = new ShowBox3();
      oMessageOne.displayMessage();
      oMessageOne.changeMessage("Pepsi tastes Better.");
      oMessageOne.displayMessage();
      System.exit(0);
  }
}
```

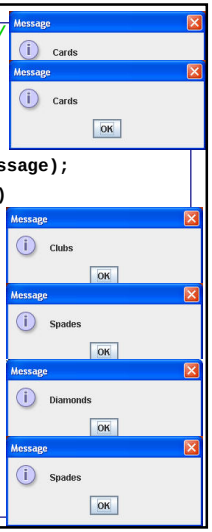



```
/* Show Box Program 4 - No Constructor
 * Author: Robert Laurie
 */
import javax.swing.*;
public class ShowBox4
{
  // Data declaration section
  private String sMessage;

  // Methods definition section
  public void displayMessage()
  {
    JOptionPane.showMessageDialog(null,sMessage);
  }
  public void changeMessage(String sNewMsg)
  {
    sMessage = sNewMsg;
  }
  public static void main(String[] args)
  {
      ShowBox4 oMessageOne;
      oMessageOne = new ShowBox4();
      oMessageOne.displayMessage();
      oMessageOne.changeMessage("Java is Fun");
      oMessageOne.displayMessage();
      System.exit(0);
  }
}
```


```
1.  /* Show Box Program 5 - Multiple Objects */
2.  import javax.swing.*;
3.  public class ShowBox5

4.  {
5.    private String sMessage = "Cards";
6.
7.    public void displayMessage()
8.    {
9.      JOptionPane.showMessageDialog(null,sMessage);
10.   }
11.   public void changeMessage(String sNewMsg)
12.   {
13.     sMessage = sNewMsg;
14.   }
15.   public static void main(String[] args)
16.   {
17.       ShowBox5 oMsg1, oMsg2, oMsg3;
18.       oMsg1 = new ShowBox5();
19.       oMsg2 = new ShowBox5();
20.       oMsg3 = new ShowBox5();
21.       oMsg1.displayMessage();
22.       oMsg1.changeMessage("Spades");
23.       oMsg2.displayMessage();
24.       oMsg2.changeMessage("Diamonds");
25.       oMsg3.changeMessage("Clubs");
26.       oMsg3.displayMessage();
27.       oMsg1.displayMessage();
28.       oMsg2.displayMessage();
29.       oMsg3.displayMessage();
30.       System.exit(0);
31.   }
32. }
```




```
1.  /* Card Program - Better Card Output */
2.  import javax.swing.*;
3.  public class Card
4.  {
5.    private String sOrder;
6.    private String sRank;
7.
8.    public void showCard()
9.    {
10.     JOptionPane.showMessageDialog(null, sRank,
              sOrder+" Card", JOptionPane.INFORMATION_MESSAGE);
11.   }
12.   public void setCard(String sNewOrder, String sNewRank)
13.   {
14.     sOrder = sNewOrder;
15.     sRank = sNewRank;
16.   }
17.   public static void main(String[] args)
18.   {
19.       Card oCard1, oCard2, oCard3;
20.       oCard1 = new Card();
21.       oCard2 = new Card();
22.       oCard3 = new Card();
23.       oCard1.setCard("1st", "4 \u2660");
24.       oCard2.showCard();
25.       oCard2.setCard("2nd", "K \u2666");
26.       oCard3.setCard("3rd", "A \u2665");
27.       oCard1.showCard();
28.       oCard2.showCard();
29.       oCard3.showCard();
30.       System.exit(0);
31.   }
32. }
```