

Swing and JOptionPane

Using GUI Components

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Topics list

- Swing
- JOptionPane
- JOptionPane methods

Using Swing to create dialog boxes

- What is Swing?
 - **Swing** is a set of program components for **Java** programmers that allow you to create graphical user interface (GUI) components
 - e.g. buttons, scroll bars, etc
- We make swing components available to us by 'import'ing the swing components at the start of the program.

```
import javax.swing.*;
```

Imports all swing components



Using JOptionPane with Swing

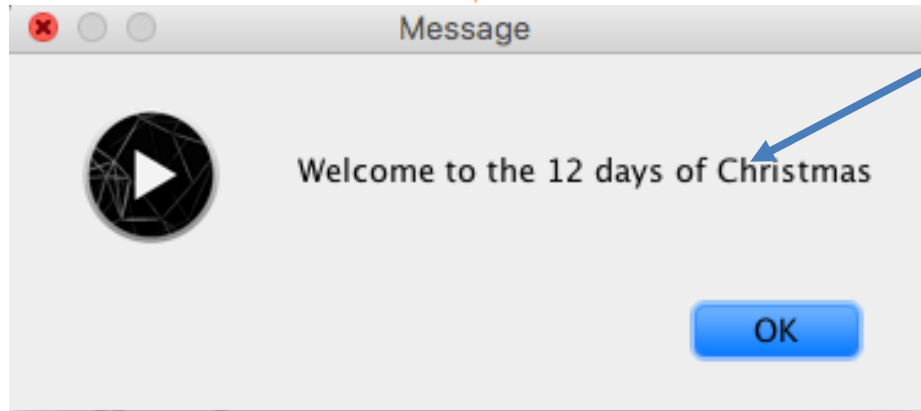
- Having imported Swing, we can use these
- JOptionPane methods:
 - showMessageDialog
 - Simple message output
 - showInputDialog
 - Allows user to type in (string) input
 - showConfirmDialog
 - Allow the user to choose an option

Simple Message output

null will work as first parameter.

```
JOptionPane.showMessageDialog(null, "Welcome to the 12 days of Christmas");
```

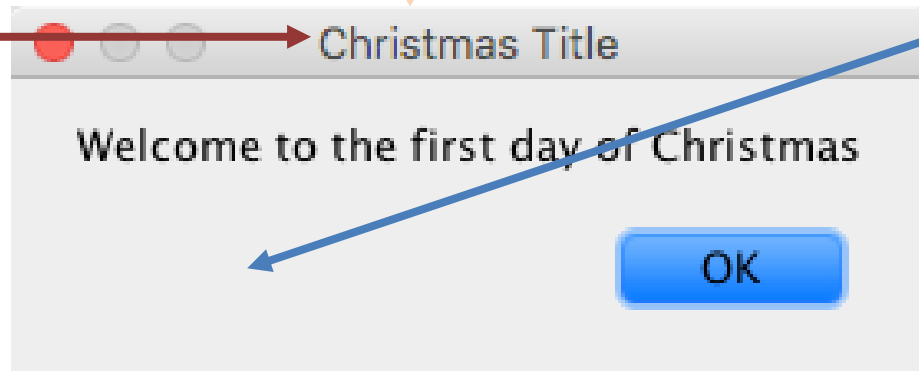
Text in Dialog box



Message output with label

```
JOptionPane.showMessageDialog(null,  
    "Welcome to the 12 days of Christmas"  
    "Christmas Title",  
    JOptionPane.PLAIN_MESSAGE);
```

Text for title of
box



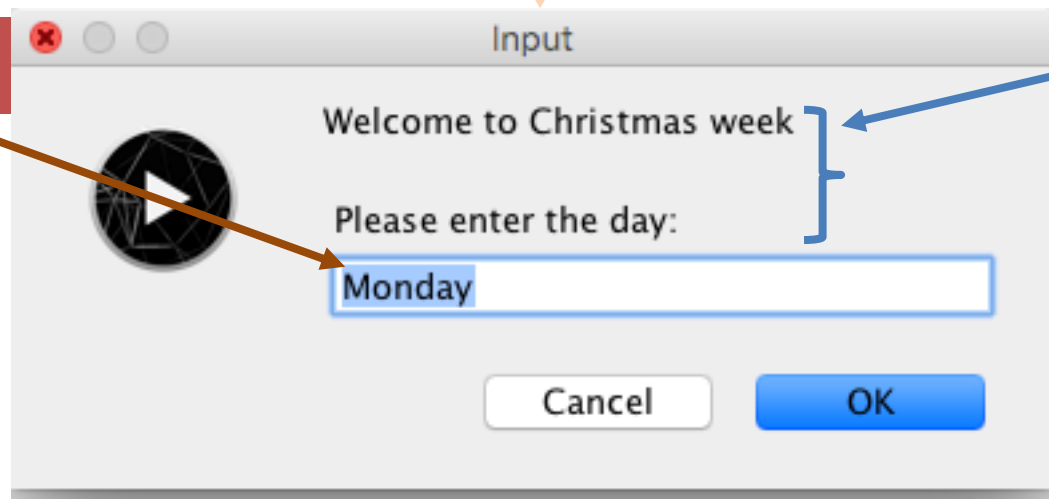
This means
'no icon'

Message output with label

```
String day = JOptionPane.showInputDialog(  
    "Welcome to Christmas week\n\n " +  
    "Please enter the day: ",  
    "Monday");
```

Default value

Prompt text



Reading in numbers via JOptionPane

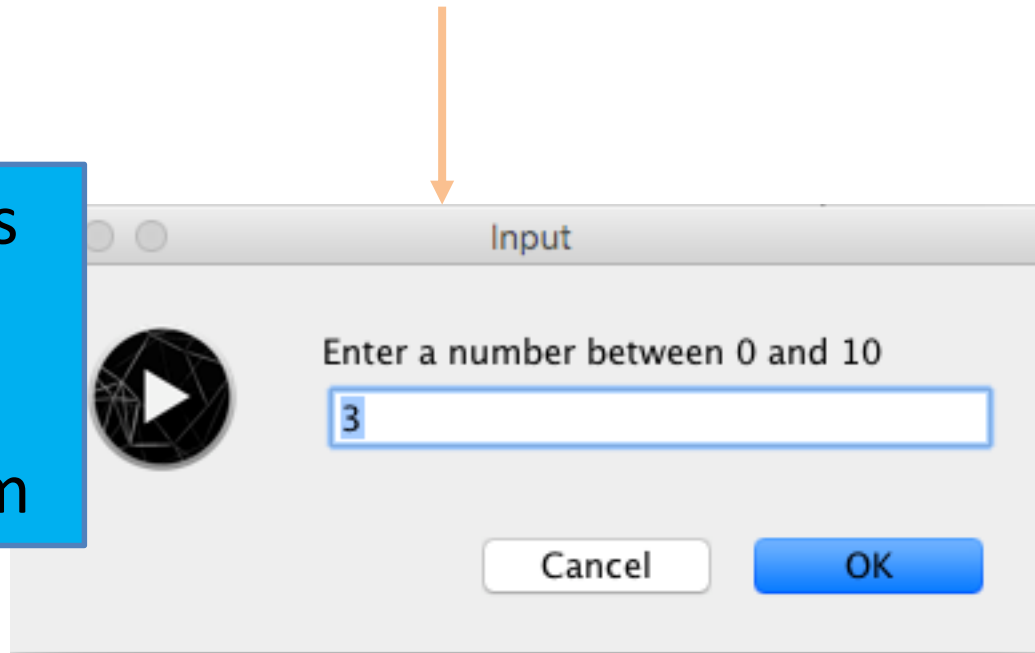
- Problem:
 - showInputDialog returns a String
 - So if you type 22, it is the string “22”, so cannot use it as a number
- Solution
 - Use a predefined method to convert it (or any such string) to a number.

```
int number = Integer.parseInt("22");  
println (number + 3);  
Will print the number 25
```


Using parseInt with input

```
int num = Integer.parseInt (JOptionPane.showInputDialog(  
    "Enter a number between 0 and 10", "3" ) );
```

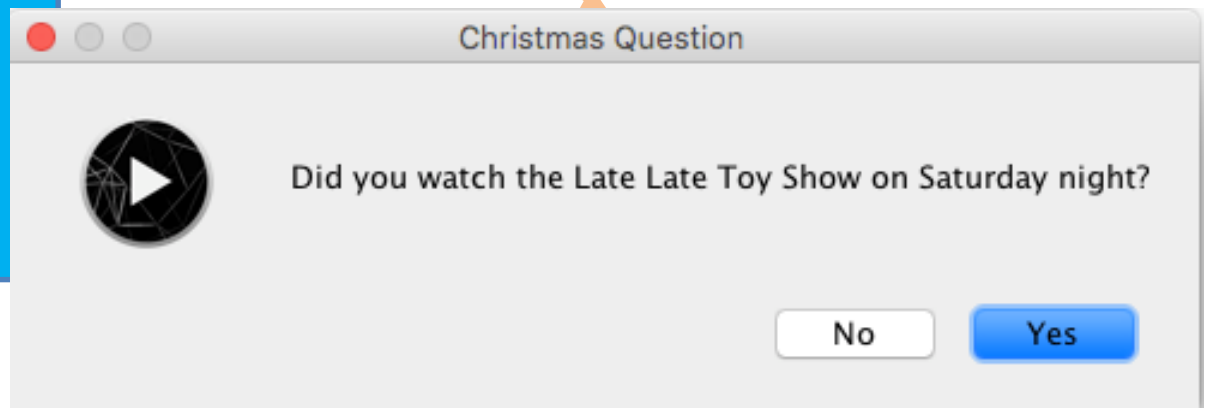
This converts
the input
string to an
integer - num



Using the Yes/No option

```
int reply = JOptionPane.showConfirmDialog(null,  
    "Did you watch the Late Late Toy Show on Saturday night?",  
    "Christmas Question",  
    JOptionPane.YES_NO_OPTION);
```

If you press 'Yes',
JOptionPane.YES_OPTION
will be returned,
JOptionPane.NO_OPTION
otherwise (reply will be
assigned this value)



Questions?





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