CS 2334: Debugger
Using the Eclipse Debugger

Sometimes we want to be able to see what our program is “thinking” at various times....
Recall Lab 2 ...

The program prints nothing!
Maybe addGadget() is the problem...

code snippet:
```java
public void addGadget(Gadget g)
{
    // Check if there is currently enough space in the belt
    if (this.currentIndex == this.gadgets.length)
    {
        // Extend the size of the gadgets array
        this.extendArray();
    }

    // Add the gadget into the gadgets array
    this.gadgets[this.currentIndex] = g;
```

Setting a Breakpoint
Breakpoint is now set
Now enter debugging context and execute program
Confirm Perspective Switch

This kind of launch is configured to open the Debug perspective when it suspends.

This Debug perspective is designed to support application debugging. It incorporates views for displaying the debug stack, variables and breakpoint management.

Do you want to open this perspective now?

☐ Remember my decision

Yes  No
Debugging View: Current Point in Program

```java
if (this.currentIndex == this.gadgets.length) {
    // Extend the size of the gadgets array
    this.extendArray();

    // Add the gadget into the gadgets array
    this.gadgets[this.currentIndex] = g;
}
```
Debugging View: Current Variable Values

if (this.currentIndex == this.gadgets.length) {
  // Extend the size of the gadgets array
  this.extendArray();
}

this.gadgets[this.currentIndex] = g;
Step Into: Execute one line of code and stop (even if that is within a method)
Step Over: Execute one line of code and stop (stay within the current method)
Step Over: now at next line
Step Over: now at the next-next line
The Batarang has been added to the UtilityBelt but currentIndex has not been updated!
Getting Out of Debug Mode

```
hspace in the belt
s.length)
s array
```

Andrew H. Fagg: CS2334: Lab 5
Live demonstration....