

The background of the slide is a grayscale image of a circuit board. It features a complex network of black lines representing traces and several large black circular pads. A prominent dark horizontal band runs across the middle of the image, serving as a background for the text.

CMSC 131

Fall 2018

Announcements

- Project #4 has been posted

Java Packages

- What's a package and why is this useful?
- Identifiers for packages
- Declaring the package for a class
- Accessing other classes from...
 - Within the current package
 - From a distant package
 - Using “fully-qualified name”
 - Using import
- Import with wildcard
 - Avoid this (naming collisions)
- `Java.lang` is special

Java Libraries

- What are they and why do we care?
- Where is the documentation?
- Let's study the API for a couple common classes:
 - String
 - Math

Break

```
while(...) {  
    ...  
    if (...) {  
        break;  
    }  
    ...  
}
```

- Used with loops
- Why might this be “questionable” style?
- What happens with nested loops?
- Are there examples where “break” works well?

Continue

```
while(...) {  
    ...  
    if (...) {  
        continue;  
    }  
    ...  
}
```

- Used with loops
- Why might this be “questionable” style?
- What happens with nested loops?
- How does this work with for-loops?
- Are there examples where “continue” works well?

Example

BreakContinueExample.java

Runtime Errors

Examples of Runtime Errors

Let's consider a concrete case:

Example: `TriangleAreaCalculator.java`

What could go wrong here?

What should be done?

- Error message and terminate?
- Return an “error code”?
- “Throwing an exception”.