CMSC131

Static and Instance Methods:
The String and Integer Classes

The String Class

• We've used this class already a little.
• We've created a new String object with an initial value:
  
  String s = "hello";
• We've invoked an instance method using a String object:
  
  upperVersion=orignalString.toUpperCase();
The Integer Class

- In addition to the int primitive data type, there is an Integer class.
- Integer objects can hold an integer but also have:
  - Instance methods to do things like convert specific Integer objects to strings or generate hash codes.
  - Static methods to do things like convert strings into integers.

Some Useful Static and Instance Methods

```java
//substring is an instance method
String s = "012345";
System.out.println(s.length());
System.out.println(s.substring(2,4));

//parseInt is a static method
int i = Integer.parseInt("375");
System.out.println(i);
//NOTE: Integer.parseInt("3.14") would crash

//toString has both static and instance method versions
int i = 8;
System.out.println(Integer.toString(i));

Integer intObj = 17;
System.out.println(intObj.toString());
```
More to come…

• We will see and use String, Integer, and other useful classes more as the semester progresses…