

CISC124 – Today's Topics		
<ul style="list-style-type: none"> <li>• Wrapper classes</li> <li>• Math class</li> <li>• String class</li> <li>• StringTokenizer class</li> <li>• Method Overloading</li> </ul>		
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Wrapper classes		
<ul style="list-style-type: none"> <li>• Primitive types: byte, short, long, float, double and char</li> <li>• Corresponding class types (wrapper classes):               <ul style="list-style-type: none"> <li>• Byte, Short, Long, Float, Double, and Character</li> <li>• Use in storing a corresponding primitive type and operating on it</li> <li>• Have instance methods that operate on value stored (toString(), intValue(), charValue(), etc.)</li> <li>• Have static methods that operate on external values of the same type (Integer.parseInt("123"), Character.toUpperCase("a"), etc.)</li> </ul> </li> <li>• Boxing:               <ul style="list-style-type: none"> <li>• A primitive type value is assigned to an object of a corresponding wrapper class type</li> </ul> </li> <li>• Unboxing:               <ul style="list-style-type: none"> <li>• An instance object of a wrapper class type is assigned to a corresponding primitive type variable</li> </ul> </li> </ul>		
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Math class		
<ul style="list-style-type: none"> <li>• In java.lang package (no need to import it)</li> <li>• Only static methods (math functions). Use the class name to call a method → <code>Math.pow(e, 2)</code></li> <li>• Use <code>import static java.lang.Math.pow</code> if method calls are not prefixed with <code>Math</code>.</li> <li>• Store transcendental math constants: <code>PI</code>, <code>E</code></li> </ul>		
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String class		
<ul style="list-style-type: none"> <li>• In java.lang package (no need to import it)</li> <li>• Instance and static methods</li> <li>• Instance methods               <ul style="list-style-type: none"> <li>• Operate on string stored in object that is an instance of type <code>String</code></li> <li>• Indexed access of characters, substring extraction, comparison of currently stored string with external ones, etc.</li> </ul> </li> <li>• Static methods               <ul style="list-style-type: none"> <li>• Convert other data to string</li> <li>• Format strings</li> <li>• Join sequences of characters into a string</li> </ul> </li> </ul>		
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StringTokenizer class		
<ul style="list-style-type: none"> <li>• In java.util package</li> <li>• Breaks a stream of strings into tokens</li> <li>• Instance methods only               <ul style="list-style-type: none"> <li>• Can count tokens</li> <li>• Can check for more tokens in a stream</li> <li>• Can identify and get the next token based on configurable delimiters</li> </ul> </li> </ul>		
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