Appendix A -- Java Quick Reference

class java.lang.Object // all classes inherit and may override these methods

- `boolean equals(Object other)`
- `String toString()`

interface java.lang.Comparable

- `int compareTo(Object other)` // return value < 0 if `this` is less than `other`
  // return value = 0 if `this` is equal to `other`
  // return value > 0 if `this` is greater than `other`

class java.lang.Integer implements java.lang.Comparable

- `Integer(int value)` // constructor
- `int intValue()`

class java.lang.Double implements java.lang.Comparable

- `Double(double value)` // constructor
- `double doubleValue()`

class java.lang.String implements java.lang.Comparable

- `int length()`
- `String substring(int from, int to)` // returns the substring beginning at `from`
  // and ending at `to-1`
- `String substring(int from)` // returns `substring(from, length())`
- `int indexOf(String s)` // returns the index of the first occurrence of `s;`
  // returns `-1` if not found

class java.lang.Math

- `static int abs(int x)`
- `static double abs(double x)`
- `static double pow(double base, double exponent)`
- `static double sqrt(double x)`

class java.util.Random

- `int nextInt(int n)` // returns an integer in the range from 0 to `n-1` inclusive
- `double nextDouble()` // returns a double in the range [0.0, 1.0)

class java.util.ArrayList

- `int size()`
- `boolean add(Object x)` // appends `x` to end of list; returns `true`
- `Object get(int index)`
- `Object set(int index, Object x)` // replaces the element at `index` with `x`
  // returns the element formerly at the specified position
- `void add(int index, Object x)` // inserts `x` at position `index`, sliding elements
  // at position `index` and higher to the right
  // (adds 1 to their indices) and adjusts size
- `Object remove(int index)` // removes element from position `index`, sliding elements
  // at position `index + 1` and higher to the left
  // (subtracts 1 from their indices) and adjusts size
  // returns the element formerly at the specified position