**SortTimer.java**

**Directions:** This program is designed to track the speed of each sort algorithm.

1. Create the StopWatch Class below.
2. Create the SortTimer class with a *main* method.
3. Inside the *main*, instantiate a new StopWatch.
4. Create an integer array of 100,000 integers initialized to random values from 1 to 100,000.
5. Use *clone()* to create duplicates of the random array for each sort method.
6. Use the StopWatch to time and print the speed of each Sort Method.

Bubble Sort Time: 14.257

Selection Sort Time: 3.101

**StopWatch.java**

**Instance Variables:**

* long integers for *startTime*, *stopTime,* and *timeElapsed*

**Constructors:**

* A default constructor that initializes all instance variables to 0

**Methods:**

* void start() – Uses currentTimeMillis to record the start time
* void stop() - Uses currentTimeMillis to record the stop time AND updates timeElapsed
* double getSecondsElapsed() – returns difference of startTime and stopTime
* void reset() – sets all instance variables back to 0