

HW 8

For HW10 we will write a Java program that sorts objects whose class implements the *Comparable* interface. The *Comparable* interface specifies four methods:

double value(); This method returns the value of a *Comparable* object as a double precision floating point number.

boolean lessThan(Comparable c); This method compares what is returned by *this.value()* and *c.value()*, and returns *true* is *this.value < c.value()*, and *false* otherwise.

boolean equal(Comparable c); This method compares what is returned by *this.value()* and *c.value()*, and returns *true* is *this.value == c.value()*, and *false* otherwise.

boolean greaterThan(Comparable c); This method compares what is returned by *this.value()* and *c.value()*, and returns *true* is *this.value > c.value()*, and *false* otherwise.

You must write the *Comparable* interface. You must modify the classes *Int*, *Flt*, *Hex* and *Any* that *implement* *Comparable*. *Main.java*, which is largely or completely written, will create an array of *Int*, *Flt*, *Hex* and *Any* objects and sort them.

The solution for this has 250 lines and the skeleton code I have provided has about 225 lines, so the volume of code (if you write the right code) should not be large.