CSF
Hwk02
If you're happy and you know it….

In this lab you will develop a number of methods that that make decisions. Name your class file h2.java. Run your methods using: h2.<methodname>(<params>) to determine what your method returns. Run my methods using h2a.<methodname>(<params>) to determine what the method should return. Run a full test on your method using: h2t.<methodname>(). If it fails, you will get an input that it failed on. If it passes all the tests, you will get a success message.

1. Write method greatest3() that takes 3 doubles and returns the largest of the three.
Ex: greatest3(3,7,1) -> 7, greatest3(1,2,3) -> 3

2. Write a method allDiff3() that takes three doubles and returns a boolean. It should return true if all of the numbers are different, and otherwise it should return false.
Ex: allDiff3(3,1,2) -> true, allDiff3(1,2,2) -> false, allDiff3(1,2,1) -> false

3. Write a method inOrder3() that takes three doubles and returns a boolean. It should return true if the numbers go from smallest to largest, and otherwise it should return false.
Ex: inOrder3(1,3,10) -> true, inOrder3(1,10,3) -> false, inOrder3(10,1,3) -> false

4. Write method sumGreatest23() that takes 3 doubles and returns the sum of the two greatest ones.
Ex: sumGreatest23 (3,7,1) -> 10, sumGreatest23 (1,2,3) -> 5, sumGreatest23 (5,2,6) -> 11

5. Write a method isRight() that takes three doubles and determines if they can form a right triangle. Use greatest3() to help you! This method should return a boolean.
Ex: isRight(4,3,5) -> true, isRight(5,6,7) -> false. Note!: If any of the numbers are 0, the answer should be false.

6. Write a method countGreater34() that takes four doubles and determines how many of the first three numbers are greater than the fourth number. This method should return a double.
Ex: countGreater34(4,3,5,4) -> 1, countGreater34(11,3,14,10) -> 2

7. Write a java method addOrMult() that takes three doubles and a boolean and returns a double. It should return the sum of the three numbers if the boolean is false, and the product of the three numbers if the boolean is true.
Ex: addOrMult(2,5,3,false) -> 10, addOrMult(2,5,3,true) -> 30

8(extra). Write a method diffOrOrder3() that takes three doubles and returns a boolean. If the sum of the numbers is less than 10, then it should return the allDiff3() of the numbers. Otherwise, it should return the inOrder3() of the three numbers.

9(extra). Write a method greater2Or3() that takes five doubles and returns the greater of: the sum of the two largest numbers and the sum of the two smallest numbers.