CS 101 Midterm 3

Grading Guidelines

Questions 1 & 2: All or nothing, as long as they entered a value

Question 3 (top of page 2: there were two questions labeled as question 3):
　　　-2 for each missing i = 2
　　　-2 for missing int[] c. Note that they don't have to put a value there (as it can either be null or uninitialized).
　　　-1 for not listing a reference pointing to an array (for a, b, d, and e) to a max of -3
　　　-3 if they have d pointing to the same array as a
　　　-2 if they e and b don't point to the same array

Question 3 (bottom of page 2: there were two questions labeled as question 3): Each one is worth 1 point

Question 4: -1 for each error. Note that mystery should be a reference to the array of size 3.

Question 5:
　　　-2 if each of the following errors: not static, not public, wrong return type, wrong name, wrong parameter list
　　　-3 if they truncate the value to an int
　　　-4 for not iterating properly through the array
　　　-2 if they don't properly add up the values in the array
　　　-2 for not properly computing the average via division
　　　-2 for not properly returning the correct value

Question 6:
　　A.　-2 if silverware and flatware are not references to arrays
　　　　-3 if they have silverware and flatware point to the same array
　　　　-3 if they have the elements in the arrays pointing to different objects
　　　　-3 if s and f point to the same array
　　　　-2 if no refs for array variable (and -1 below)
　　B.　Partial credit based on how well they got this. If they got the general idea, then they get full credit, even if they had problems explaining it
　　C.　All or nothing on this part
　　D.　They can get full credit on this, even if they got (c) wrong – so base their answer for (d) on their answer for (c)
　　　　-3 for not iterating through the array
　　　　They can duplicate the Strings any way they want (.clone() is the easiest, but they can do anything else)

-3 if they are trying to write a deep copy, and they do a shallow copy instead or vise-versa
E. Same grading criteria as (a). Note that they can get full credit on this even if they got (c) wrong. But their answer depends on the code they wrote for part (d)

Question 7: 2 points for each (they will need an array and a size). Don't worry about the names of the variables, just the types.

-1 for each that is not private
No points off if they are initialized in the constructor (question 8) rather than here
-2 if they are made final when they shouldn't be (i.e. size). Note that the array can be final, and the stack will work just fine

Questions 8-13 all have the following deductions:

-2 if static
-2 if private
-2 for bad return type
-2 for a bad method name
-2 for incorrect parameter list (missing or extra parameters)
-4 for using null / non-int type with int array
No points deducted if it is not public
No points if they use accessor/mutator methods that they didn't define, as long as those methods are reasonably named (such as getLength(), etc)
No points off if they do a full copy on each operation to increase the size of the array by one. It's not ideal, but if it works, they get full credit. If it doesn't work, then take points off, of course.
On the 8 point questions, at most 4 points off if they got the right idea
On the 8 point questions, 1 point for the correct header with no body
On the 8 point questions, 2 points if the body was present, but pretty much totally wrong

Question 8,11 & 12: each is worth 4 points

-3 if the body is just totally wrong, -2 if it mostly wrong, and -1 for minor errors in the body
Note that the variables can be initialized in question 7, at which point question 8 will have a blank constructor – this is fine, and gets full credit

Questions 9 & 10: each is worth 8 points

-2 for not accessing the correct spot in the array
-2 for not properly updating the size field
-2 for incorrect value returned

Question 13: If they did either, then only grade the search(), regardless of how well they did on the two questions

-4 for not iterating through the array properly

Note that we didn't specify that the toString() should print square brackets or spaces after the commas, so no points off if they leave those out

-1 if there is a trailing comma

-3 if they use an else return false inside the loop

-1 for method header errors (missing return type, etc.)

No deduction if static BUT passes array in parameters

Most errors are -1 or -2

If body is completely wrong, give 1 point for getting the header