

CS211 Fall 2013

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Exam 2, part 2

Student Name: _____

Student G#: _____

Student signature for Honor Code:

1. Fill in the Junit test cases for the following scenario. The test case MUST reveal the bug as described. (15 points)

Scenario: Imagine you are trying to write a method with the following signature:
public ArrayList sortDescending(ArrayList listIn)

This method will sort the incoming objects in descending order, based on their natural sorted ordering, as determined by the **Comparable** interface implementation. You may assume the method will only be called with objects that are **Comparable**, and you should not test for anything else.

The person who coded up this method did a good job, but they were distracted when writing their code, and they never consider the last element in the incoming argument for **listIn**. That is, the size of the incoming argument and the returned list are the same, but their algorithm does not consider the last element for sorting.

- a. Write a Junit test case that would reveal this fault (assume all imports exist):

```
public void test1(){  
    //your code here
```

```
}
```

- b. Now write a test case that would pass on the problem above, but would not reveal the fault we're looking for:

```
public void test2(){  
    //your code here
```

```
}
```

2. TRUE/FALSE. Circle one and justify your answers for full credit. (5 points)

a. A parent's public method can be accessed within the child using the super keyword. a. TRUE FALSE

b. A parent's private method can be accessed within the child using the super keyword. b. TRUE FALSE

c. An abstract class must contain at least one abstract method. c. TRUE FALSE

d. A try-catch block can have multiple catch clauses. d. TRUE FALSE

e. A class can implement multiple interfaces. d. TRUE FALSE