CS427 Quiz 5

December 3, 2015

Name: ________________________________
Netid: ________________________________

This is a closed book, closed notes quiz. You may not use calculators or any other electronic devices. Any sort of cheating on the quiz will result in a zero grade.

This quiz has two pages.

We cannot give any clarifications about the quiz questions. If you are unsure of the meaning of a specific question, write down your assumptions and proceed to answer the question on that basis.

1. Describe two reasons why XP advocates having a *spike solution* before diving into a project.

2. Write a postcondition for the method below. Fill in the blank with a boolean expression.

```java
// returns the absolute value of a number.
public static int abs(int number)
{
    if (number < 0)
    {
        number = number * -1;
    }
    assert _________________;
    return number;
}
```

3. The testing catalog from the required reading has some suggestions for testing input in various situations. Say you want to test some linked structures (trees, queues, graphs, etc). List two types of structures from the reading that a developer should test.
4. The slides on testing (8u.pptx) described condition coverage, branch coverage, and coverage subsumption. Does condition coverage subsume branch coverage? Why or why not?