

CS 62 Quiz

ArrayList & Big-O

Mawhorter Spring 2017

Name: _____

1. Recall that an ArrayList has add, set, get, and size methods. The following function is supposed to scan through a sorted array to check whether it contains a given value. Fill in both blanks below (use space on the back if you need to):

```
public boolean findValue(int lookFor, ArrayList<Integer> sorted, int testIndex) {  
  
    if ( _____ ) {  
        return false;  
    }  
  
    int valueHere = _____;  
  
    if (valueHere > lookFor) {  
        return findValue(lookFor, sorted, testIndex - 1);  
    } else if (valueHere < lookFor) {  
        return findValue(lookFor, sorted, testIndex + 1);  
    } else {  
        return true;  
    }  
}
```

2. What are the best-case and worst-case big-O runtimes of this code?

Best-case:

Worst-case: