

Quiz 12: ArrayLists and helper functions SOLUTION

CSCI 110 Section 1

Wednesday, September 21, 2016

- 1) Write a helper function called `isWhimsical` that returns true if a number is whimsical. Whimsical numbers are evenly divisible by 7, 13, and 23. [50 points]

```
boolean isWhimsical(int num) {  
    return num % 7 == 0 && num % 13 == 0 && num % 23 == 0;  
}
```

- 2) Write a function that returns an `ArrayList` containing all of the whimsical numbers from a caller-specified range using your helper function from question 1. [50 points]

```
ArrayList<Integer> getWhimsicalNumbers(int start, int end) {  
    ArrayList<Integer> whimsicalNums = new ArrayList<Integer>();  
    for (int i = start; i <= end; i++) {  
        if (isWhimsical(i)) {  
            whimsicalNums.add(i);  
        }  
    }  
    return whimsicalNums;  
}
```