Development : Written Programming Exam

This page last changed on Dec 08, 2012 by jgutierrez.

Background

Secret Santa is a way for a group of friends, family members, or co-workers to exchange gifts.

All of the participants' names are placed into a container (hat, box, bag, etc) and mixed up. Each person then chooses one name from the container, but doesn't tell anyone which name was picked. He/she is now responsible for buying a gift for the person selected.

As the "Secret Santa", he/she wraps the gift and labels it with the recipients name but doesn't indicate whom the present is from (part of the fun is in the secrecy).

All the gifts are then placed in a general area for opening at a designated time. When the time comes to give gifts, the recipient finds their gift and must guess who their Secret Santa is. If they can't guess, their Secret Santa eventually confesses.

Summary

The method *generateAssignments(...)* below is to be used in a Secret Santa draw. You are given the task of implementing the method.

```
/**
* @param participants list of individuals participating in the draw.
* @return the list of individuals paired with the participants where participants[0] is matched
* with assignments[0], participants[1] is matched with assignments[1], and so on.
*/
public String[] generateAssignments(final String[] participants) {
// Your code here.
}
```

Implement the Method

Here are some basic rules:

1. A person must be assigned to another person; no person must be assigned to himself/herself.
2. All participants must have an assigned person from the passed list of participants.
3. Shifting the names left or right is not an acceptable solution.
4. Here's an example of how the method would be used:

```
final String[] participants = new String[] { "Kyle", "Kenny", "Eric", "Stan", "Stewie", "Brian" };

final String[] assignments = generateAssignments(participants);
// Sample result: { "Eric", "Stewie", "Brian", "Kenny", "Kyle", "Stan" }
```

Note:

1. The code does not need to be syntactically correct, but it must be a complete solution.
2. A unit test is preferred but not required.