#### Task

# **Given:**

Three lists of integers sorted in ascending order. Each integer appears only once in all 3 lists, that is, if it appears in one list, it does not appear in two other lists. So effectively we have ascending sequence of numbers broken into three disjoint lists.

### To do:

Implement iterator function GetNext() that returns next element in the ascending sequence of numbers that is the union of these 3 lists (list1, list2, and list3) but skips odd numbers in the lists with an odd sequence number in it and skips even numbers in the lists with even sequence number in it. List numeration starts from 1. Do not build the union explicitly, iterate over the three given lists.

### **Example of input data:**

List 1: 1,8,15,16,35 List 2: 2,7,12,63

List 3: 10,13,14,42

## Rules to follow:

Please note that the test must be completed independently, without relying on any external knowledge sources or resources. Submitting someone else's solution will not be acceptable. During future technical testing phases, candidates will be expected to solve similar programming tests in a supervised, controlled environment at our office.

**Client side developer** candidates must submit their solution in JavaScript or TypeScript **Server side developer** candidates must submit their solution in C++. **iOS developer** candidates must submit their solution in Objective C or Swift.

Send us your solution in .txt file format.