

GetAhead - Interview Practice 1

Flattened Iterator

Given a list of iterators, implement a `FlattenedIterator` class which incrementally iterates over the integers from all the iterators in an interleaved fashion.

Example:

```
Iterators[0] = [1,2,3]
Iterators[1] = [4,5]
Iterators[2] = [6,7,8]

FlattenedIterator = [1, 4, 6, 2, 5, 7, 3, 8]
```

An iterator implements the `next()` and `hasNext()` interface. You're free to use them, and you will implement them on the `FlattenedIterator` class.

You're free to initialize `FlattenedIterator` with any data structure of your choice for the iterators.

Testing

An important part of solving any technical problem is testing it. Remember to test not only the most generic cases, like the one presented in the example, but also various corner cases. Test your code thoroughly before calling it complete. During an interview, it is often a good idea to define the test cases before even starting the implementation. This not only shows a solid problem-solving approach, but might even help you find ideas for an optimal solution.

Submission Instructions

The due date for this question is: Sunday, May 26 11:59pm BST

When you are confident about your solution, please follow these two steps to submit your solution:

1 - **Create a new document in Google Drive**, copy and paste your code in it. If you found something particularly challenging, or if you have any questions, feel free to add those to the document as comments.

2 - When done, click on the **"Turn In"** button.