

Sometimes it's better to use dynamic size arrays. Java's [ArrayList](#) can provide you this feature. Try to solve this problem using ArrayList.

You are given  $n$  lines. In each line there are zero or more integers. You need to answer a few queries where you need to tell the number located in  $y^{th}$  position of  $x^{th}$  line.

Take your input from System.in.

### Input Format

The first line has an integer  $n$ . In each of the next  $n$  lines there will be an integer  $d$  denoting number of integers on that line and then there will be  $d$  space-separated integers. In the next line there will be an integer  $q$  denoting number of queries. Each query will consist of two integers  $x$  and  $y$ .