

## 1136 - Prime Generator

### Description

Peter wants to generate some prime numbers for his cryptosystem. Help him! Your task is to generate all prime numbers between two given numbers!

### Input specification

The input begins with the number **t** of test cases in a single line (**t** ≤ **10**). In each of the next **t** lines there are two numbers **m** and **n** (**1** ≤ **m** ≤ **n** ≤ **10<sup>9</sup>**, **n-m** ≤ **10<sup>5</sup>**) separated by a space.

### Output specification

For every test case print all prime numbers **p** such that **m** ≤ **p** ≤ **n**, one number per line, print an empty line after each test case.

### Sample input

```
2
1 10
3 5
```

### Sample output

```
2
3
5
7

3
5
```

### Hint(s)

Warning: large Input/Output data, be careful with certain languages (though most should be OK if the algorithm is well designed)