

**DUE DATE: 20.11.2019**

## Generate a prime number greater than a given number

- Given a number N, generate the **least** prime number greater than N.
- N is an integer with 1-10 digits.
- Do not use the basic brute force primality testing algorithm.

### **Input format:**

- The first line represents the number of test cases T
- The next T lines are numbers with 1-10 digits

### **Output format:**

- There will be T lines that have the T numbers just greater than the number given.

### **Sample Input file:**

```
5
10
100
1000
10000
100000
```

### **Sample Output file:**

```
11
101
1009
10007
100003
```