TWIN PRIMES

Twin Primes are the pair of prime numbers that differ by two. For ex.

3,5

11,13

29,31

(each differ by two)

Input

First line of input consists of T (number of test cases).

Next T lines contains a single number N (indicating the Nth pair of twin primes).

Output

For every test case output the pair of Twin Primes in each line separated by a single space.

Example

Input:

```
3
1
7
11
```

Output:

```
3 5
59 61
137 139
```

(T<=25,1<=N<=10^5)

(Try tutorial version (time limit easy) -> http://www.spoj.com/problems/TWINP2/)