Problem Prime or composite

Time Limit 1 second

Razaia and Alireza are school students. They have a homework to to check whether a number **N** is a prime number or composite or not.

Your task is to write a program to help them. **Input:**

First line contains an integer T (1 <= T <= 100) which specifies number of test cases. Each test case contains one line each

containing an integer N (1 <= N <= 10^9). **Output:**

For each test case print **"prime"** where N is composite, print

"composite" where N is not prime, otherways print "**-**".

Example

Input

3

3

4

23

Output

prim

composite

prime