# Prime Function

| | |
|---|---|
| Input file: | `standard input` |
| Output file: | `standard output` |
| Time limit: | 2 seconds |
| Memory limit: | 256 megabytes |

A **prime** number is a number that is greater than **1** and has only two factors which are **1** and itself. The first few prime numbers are **2, 3, 5, 7, 11, 13, 17, 19, 23** and **29**.

Given a number $N$. Determine whether $N$ is **prime** or **not**.

**Note:** Solve this problem using function.

## Input

First line will contain a number $T$ ($1 \leq T \leq 10^3$) number of test cases.

Next $T$ lines will contain a number $N$ ($1 \leq N \leq 10^9$).

## Output

Print "**YES**" if the $N_{th}$ number is prime otherwise, print "**NO**".

## Example

| standard input | standard output |
|---|---|
| 3<br>2<br>4<br>8 | YES<br>NO<br>NO |

## Note

Don't use an array.