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## 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	YES
2	NO
4	NO
8	

### Note

Don't use an array.