


Assignment Case	
DS using CH1	
Periode Berlaku Semester Ganjil 2024/2025 Valid on Odd Year 2024/2025	Software Laboratory Center Assistant Recruitment 25-1

## Soal

Case

### Avoiding Chaosn

In the neighborhood of **vingt-trois un**, all the houses are numbered **from 2 to 200,000**, and each resident owns a pet. The type of pet in each house is not random; instead, the species of the pet **corresponds to a prime factor of the house number**. The problem arises when a pet from one house encounters another pet of the same species from a different house, as a fight will immediately break out between them. Given that the homeowner of house number **N** wants to visit **all his lower-numbered neighbors** with his pets, how many houses can he visit without triggering any fights between the pets? **To avoid chaos, the houses visited should not has the same pet species with the homeowner of house N.**

### Input

- The first line will consist of **N** which is the house number.

### Constraint

$$2 \leq N \leq 85000$$

### Output

Output the number of house that the homeowner of house **N** can visit.

## Example

Input	Output
10	3
17	15

## Explanation

In the first test case, the owner of house number 10 has pet {2, 5}. From this we check the lower number house:

- House 9 have pet 3
- House 8 have pet 2
- House 7 have pet 7
- House 6 have pet 2, 3
- House 5 have pet 5
- House 4 have pet 2
- House 3 have pet 3
- House 2 have pet 2

meaning that he can only go to house with number 9, 7, 3 since the other houses has the same pet as him.