1. Prime Character

You're given a string **S** of length **N** consisting of lowercase latin alphabets only.

Find out how many characters have appeared **prime number of times** in the given string.

Input Format:

First line of input contains an integer **N** denoting the length of the string.

Second line of input contains the string S.

Output Format:

Print the number of characters with a frequency which is a prime.

Constraints:

 $1 \le N \le 10^3 S$ contains lowercase alphabets only

Sample I/O:

Input 1:

16

iloveprogramming

Output 1:

5

Input 2:

11

xyyyzzzzzz

Output 2:

0

Input 3:

11

ihateprimes

Output 3:

2

Explanation:

For input 1, there are 5 characters appeared for 2 times and 2 is a prime.

i	2	Prime
ι	1	
0	2	Prime
v	1	
е	1	
р	1	
r	2	Prime
g	2	Prime
а	1	
m	2	Prime
n	1	

2. Please Wear the Mask

Xi is shopping for masks, in the shop, he sees 2 types of masks:

- Disposable Masks cost X but last only 1 day.
- Cloth Masks cost Y but last 10 days

Xi wants to buy masks to last him **100** days. He will buy the masks which cost him the **least**. If there is tie in terms of cost, Xi will be eco-friendly and choose cloth masks.

Determine which type of mask will Xi choose??

Input Format:

First line of input contains **T** denoting number of test cases.

Each of next T lines contains two integers X and Y.

Output Format:

Print the output according to the description.

Constraints:

Sample I/O:

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1 \le T \le 10^3 1 \le X, Y \le 10^5
```

Input 1:

2

10 100

9 100

Output 1:

Cloth

Disposable

Input 2:

2

1 11

88 99

Output 2:

Disposable

Cloth

Explanation:

For input1,

In the first test case

- It will cost 100 * 10 = 1000 to buy disposable masks
- It will cost 10 * 100 = 1000 to buy cloth masks
 As there is a tie Xi buys cloth masks only.

In the second test case

- It will cost 100 * **9** = 900 to buy disposal masks
- It will cost 10 * 100 = 1000 to buy cloth masks
 So Xi will choose disposable masks as they cost him less.

3. Elephant and his friend

An elephant decided to visit his friend. It turned out that the elephant's house is located at point 0 and his friend's house is located at point x (x > 0) of the coordinate line. In one step the elephant can move 1, 2, 3, 4 or 5 positions forward. Determine, what is the *minimum number of steps* he needs to make in order to get to his friend's house.

Note: Check out the Sample I/O for more clarity.

Input Format: The only line of input contains *x* as mentioned in the problem statement. Output Format: Print the minimum number of steps that elephant needs to make to get from point 0 to point x. Constraints: 1 ≤ x ≤ 100000 Sample I/O: Input 1: 5 Output 1: 1 Input 2:

Elephant can move 5 positions forwards in 1st step, 5 more positions forward in 2nd step, and 2

Elephant can reach point 25 in just 5 steps by moving 5 positions forward in each step. From where

positions forward in 3rd step to reach point 12. So a total of 3 steps is required.

only 1 more step (4 positions forward) is required to reach point 29.

12

3

30

5

Output 2:

Input 3: 147

Output 3:

Input 4: 25

Output 4:

Input 5: 29

Output 5:

Explanation: For Input 2,

For Input 5,