Ramanujan's Prime Substrings

Ramanujan is so fond of playing number games. One day Ramanujan and Anish played a game. Ramanujan gave Anish a number string and asked her to find all the distinct substrings of size at most six that are prime. Anish being good at maths takes up the game and if she can give solutions to all the input sets Ramanujan provides her, Anish wins the game. Your task is to help Anish win the game.

Input Format

First line contains T, The number of test cases First line of each test case contains N, size of the string Second line contains a string of size N containing only numbers.

Constraints

- 1 <= Number of Test Cases <= 10
- 1 <= N <= 10^6

Output Format

For Each Test case, print the total number of distinct prime substrings of length at most 6.

Sample Input 0

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1
1333657
```

Sample Output 0

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4
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