

## (Adv.) Competitive Programming

Submit until end of contest, via the [judge interface](#)



### Problem: playlist (1 second timelimit)

You were asked to be DJ at a totally lame party tomorrow. During the lit live contest (Yes, we mean the one you're in right now!), the party host warns you that the party-goers are as PC as it gets. They will judge you solely on the diversity of the playlist and stop to listen once a genre plays twice. Fortunately you call yourself *Mr. Worldwide*; using the generic masculine. From all your groovy playlists with genres ranging from alternative rock to Zydeco (well, look it up), you need to find the perfect sequence of songs to start the party with. Note that you forgot your sisters Spotify Premium account credentials, so you cannot edit any of your playlists before the party. Just pick a song and let it play in the sequence given by the playlist. It goes without saying (i.e., writing), that shuffle play is too risky.

**Input** The first line contains  $n < 100$  the number of prepared playlists. For each playlist two lines follow. The first line contains the number of songs in the playlist  $0 < l \leq 10^6$ . The second line contains a string indicating the genres of all songs in the playlist. Each of the 26 totally awesome genres you know can be abbreviated by a lowercase Latin letter between a and z.

**Output** For each playlist, print the maximum number of songs you can play in sequence without repeating a genre. Assume that choosing the next song while performing is beyond the power of any human DJ. That's what playlists are for.

### Sample input

```
4
7
aabbaba
6
repeat
3
aaa
9
professor
```

### Sample output

```
2
4
1
6
```