

# Friendly URL

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A friendly URL is a Web address that is easy to read and includes words that describe the content of the webpage. This type of URL can be "friendly" in two ways. 1) It can help visitors remember the Web address, and 2) it can help describe the page to search engines.

To generate a friendly URL, we can take an approach that we take any contest and remove any character that is not suitable and replace them with dash. Also we need to limit it to a specific length so that it is not too long and lower case the letters. Afterwards we append this specific text to the base address of the website to create the full friendly URL. If we see an example, it can be easy to understand.

For example, we want to create a friendly URL for coding contest 2. So we take the name of the contest which is: "Dev Skill Coding Contest – 2" and then we remove the spaces and large dash with normal dash character like this: "dev-skill-coding-contest-2". As the length is short so we don't have any problem. If the length was too like for example, more than 50 characters, then we should have taken only the first 50 character of the converted string. So now we can append this part with the base address like: "**<https://www.devskill.com/newcontest/dev-skill-coding-contest-2>**" and that is a nice friendly URL. For our problem we only need the converted text part and we do not need to append it with base URL, because if we can make the last part, adding with URL is no big issue.

So the rules for this conversion will be as below:

- Lower case all letters.
- Replace all character except alphabet and digit with dash ('-'). Alphabets means 'A' to 'Z' and 'a' to 'z' and digit means '0' to '9'.
- There can't be two consecutive dashes.
- There can't be any leading and trailing dash.
- New line character ('\n') is out of consideration as we consider it as our string ending character, but there can be tab character ('\t') which should also be considered invalid character and should be replaced.
- The converted text should not be longer than the given maximum length.

## Input:

Input starts with an integer **T** ( $\leq 30$ ), denoting the number of test cases.

The each **T** test cases next, there will be two lines – the first line contains the maximum length of the converted text and the second line contains the content text from which we have to create the friendly URL last part. The length of content text will be less than 1000 characters. There will be no blank line or any line without any valid character. Each line will at least have one alphabet or digit. The maximum length of the converted text will be a positive 32 bit integer.

## Output:

For each test case, print the converted friendly URL last part.

Sample Input	Sample Output
3	dev-skill-coding-contest-2
26	a
Dev Skill Coding Contest 2	b
5	
-a-	
2	
b b	

## Limits:

Language	Time	Memory
C	1 Second	50MB
C++	1 Second	50MB
Java	1 Second	50MB
C#	1 Second	50MB
PHP	1 Second	50MB