Parsing URL

In computing, a Uniform Resource Locator or Universal Resource Locator (URL) is a character string that specifies where a known resource is available on the Internet and the mechanism for retrieving it.

The syntax of a typical URL is:

scheme://domain:port/path?query_string#fragment_id

In this problem, the scheme, domain is required by all URL and other components are optional. That is, for example, the following are all correct urls:

http://dict.bing.com.cn/#%E5%B0%8F%E6%95%B0%E7%82%B9 http://www.mariowiki.com/Mushroom https://mail.google.com/mail/?shva=1#inbox http://en.wikipedia.org/wiki/Bowser_(character) ftp://fs.fudan.edu.cn/ telnet://bbs.fudan.edu.cn/ http://mail.bashu.cn:8080/BsOnline/

Your task is to find the domain for all given URLs.

Input

There are multiple test cases in this problem. The first line of input contains a single integer denoting the number of test cases.

For each of test case, there is only one line contains a valid URL.

Output

For each test case, you should output the domain of the given URL.

Example

Input:

3 http://dict.bing.com.cn/#%E5%B0%8F%E6%95%B0%E7%82%B9 http://www.mariowiki.com/Mushroom https://mail.google.com/mail/?shva=1#inbox

Output:

Case #1: dict.bing.com.cn Case #2: www.mariowiki.com Case #3: mail.google.com