

Nihongo wa Muzukashii Desu

Input file:	standard input
Output file:	standard output
Time limit:	1 second
Memory limit:	256 megabytes

Japanese is one of the most difficult languages to learn in the world. Among all those twisted grammar rules, the most troublesome ones for the beginners must be the *verb conjugation* rules.

Japanese verbs appear in different forms under different contexts. By the conjugation rules between their different forms, Japanese verbs can be roughly grouped into three types. We now introduce you the *masu form* to *te form* conjugation rule for the first type of verbs.

- We say a verb is in *masu form* if it ends with “masu” (ます). For example, “naraimasu” (習います, learn) and “nomimasu” (飲みます, drink) are all *masu form* verbs.
- We say a verb is in *te form* if it ends with “te” (て) or “de” (で). For example, “naratte” (習って, learn) and “nonde” (飲んで, drink) are all *te form* verbs.
- If the *masu form* of a verb ends with “imasu” (います), “chimasu” (ちます) or “rimasu” (ります), to change it into its *te form*, we remove the “imasu”, “chimasu” or “rimasu” at the end and append “tte” (って) to it. For example, “kaimasu” (買います, buy) → “katte” (買って), “machimasu” (待ちます, wait) → “matte” (待って) and “kaerimasu” (帰ります, return) → “kaette” (帰って).
- If the *masu form* of a verb ends with “mimasu” (みます), “bimasu” (びます) or “nimasu” (にます), to change it into its *te form*, we remove the “mimasu”, “bimasu” or “nimasu” at the end and append “nde” (んで) to it. For example, “nomimasu” (飲みます, drink) → “nonde” (飲んで), “yobimasu” (呼びます, call) → “yonde” (呼んで) and “shinimasu” (死にます, die) → “shinde” (死んで).
- If the *masu form* of a verb ends with “kimasu” (きます), to change it into its *te form*, we remove the “kimasu” at the end and append “ite” (いて) to it. For example, “kakimasu” (書きます, write) → “kaite” (書いて). But there is only one verb this rule does not apply, which is the verb “ikimasu” (行きます, go) → “itte” (行って).
- If the *masu form* of a verb ends with “gimasu” (ぎます), to change it into its *te form*, we remove the “gimasu” at the end and append “ide” (いで) to it. For example, “isogimasu” (急ぎます, hurry) → “isoide” (急いで).
- If the *masu form* of a verb ends with “shimasu” (します), to change it into its *te form*, we remove the “shimasu” at the end and append “shite” (して) to it. For example, “kashimasu” (貸します, lend) → “kashite” (貸して).

It’s time to check how much you’ve learnt in this lesson! Given a Japanese verb of the first type in its *masu form* represented in romaji (which means in lower-cased English letters), please change it into its *te form*.

You might have noticed that if we represent a Japanese verb in romaji, for example “nomimasu”, it’s hard to tell whether this verb ends with “imasu” or “mimasu” for the beginners (actually it ends with “mimasu” as “mi” is one syllable). To simplify this problem, we will not provide you with verbs ending with “imasu”.

Input

There are multiple test cases. The first line of the input contains an integer T (about 100) indicating the number of test cases. For each test case:

The first and only line contains a string s ($1 \leq |s| \leq 30$) which is a Japanese verb of the first type in its masu form presented in romaji. This verb is guaranteed to end with “chimasu”, “rimasu”, “mimasu”, “bimasu”, “nimasu”, “kimasu”, “gimasu” or “shimasu”.

Output

For each test case output one line containing one string indicating the te form of the verb in romaji.

Example

standard input	standard output
10	matte
machimasu	kaette
kaerimasu	nonde
nomimasu	yonde
yobimasu	shinde
shinimasu	kaite
kakimasu	itte
ikimasu	kiite
kikimasu	isoide
isogimasu	kashite
kashimasu	