

Convert time from 12 hour to 24 hour format

Given a time in 12-hour AM/PM format, convert it to military (24-hour) time.

Note: Midnight is 12:00:00 AM on a 12-hour clock and 00:00:00 on a 24-hour clock. Noon is 12:00:00 PM on 12-hour clock and 12:00:00 on 24-hour clock.

Input:

The first line of input contains an integer T denoting the number of test cases. Then T test cases follow. Each test case contains a single string containing a time in 12-hour clock format(hh:mm:ss AM or hh:mm:ss PM).

Output:

Convert and print the given time in 24-hour format.

Constraints:

$1 \leq T \leq 10^5$

$1 \leq hh \leq 12$

$1 \leq mm, ss \leq 59$

Example:

Input:

2

07:05:45PM

01:05:45AM

Output:

19:05:45

01:05:45