

Time to Words

Given a time in the format of hh:mm (12-hour format) $0 < hh < 12$, $0 \leq mm < 60$. The task is to convert it into words

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 two space separated integers 'h' and 'm' denoting hours and minutes respectively.

Output:

Output the input time into words.

Constraints:

$$1 \leq T \leq 10^5$$

$$1 \leq h \leq 12$$

$$1 \leq m \leq 60$$

Example:

Input:

6
6 0
6 10
6 15
6 30
6 45
6 47

Output:

six o' clock
ten minutes past six
quarter past six
half past six
quarter to seven
thirteen minutes to seven