#### The Fiscal Code

Each person in Italy has an unique identifying ID code issued by the national tax office after the birth registration: the Fiscal Code (Codice Fiscale).

Given an object containing the personal data of a person (name, surname, gender and date of birth) return the 11 code characters as a string following these steps:

- 1. Generate 3 capital letters from the **surname**, if it has:
  - a. At least 3 consonants then the first three consonants are used. (Newman -> NWM).
  - b. Less than 3 consonants then vowels will replace missing characters in the same order they appear (Fox -> FXO | Hope -> HPO).
  - c. Less than three letters then "X" will take the third slot after the consonant and the vowel (Yu -> YUX).
- 2. Generate 3 capital letters from the **name**, if it has:
  - Exactly 3 consonants then consonants are used in the order they appear (Matt -> MTT).
  - b. More than 3 consonants then first, third and fourth consonant are used (Samantha -> SNT | Thomas -> TMS).
  - c. Less than 3 consonants then vowels will replace missing characters in the same order they appear (Bob -> BBO | Paula -> PLA).
  - d. Less than three letters then "X" will take the third slot after the consonant and the vowel (AI -> LAX).
- 3. Generate 2 numbers, 1 letter and 2 numbers from date of birth and gender:
  - a. Take the last two digits of the year of birth (1985 -> 85).
  - b. Generate a letter corresponding to the month of birth (January -> A | December -> T) using the table for conversion included in the code.
  - c. For males take the day of birth adding one zero at the start if is less than 10 (any 9th day -> 09 | any 20th day -> 20).
  - d. For females take the day of birth and sum 40 to it (any 9th day -> 49 | any 20th day -> 60).

### Notes

- Code letters must be uppercase.
- Date of birth is given in D/M/YYYY format.
- The conversion table for months is already in the starting code.

### Input

The first line of input contains name, surname, gender and date of birth, all separated by a space.

## Output

The first line contains the fiscal code.

# Sample input

# Sample output

Matt Edabit M 1/1/1900	DBTMTT00A01
Helen Yu F 1/12/1950	YUXHLN50T41
Mickey Mouse M 16/1/1928	MSOMKY28A16