

The Fiscal Code

Source: Edabit

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Algorithms, formatting, objects, strings

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*). Check the **Resources** tab for more info on this.

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:

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

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Examples

```
fiscalCode({
  name: "Matt",
  surname: "Edabit",
  gender: "M",
  dob: "1/1/1900"
}) → "DBTMTT00A01"
```

```
fiscalCode({
  name: "Helen",
  surname: "Yu",
  gender: "F",
  dob: "1/12/1950"
}) → "YUXHLN50T41"
```

```
fiscalCode({
  name: "Mickey",
  surname: "Mouse",
  gender: "M",
  dob: "16/1/1928"
}) → "MSOMKY28A16"
```

Notes

- Code letters must be uppercase.
- Date of birth is given in D/M/YYYY format.
- The conversion table for months is available below:

Conversion Table for Months

```
const months = { 1: "A", 2: "B", 3: "C", 4: "D", 5: "E", 6: "H", 7:
"L", 8: "M", 9: "P", 10: "R", 11: "S", 12: "T" }
```