

B. Ancient Prophecy

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

A recently found Ancient Prophecy is believed to contain the exact Apocalypse date. The prophecy is a string that only consists of digits and characters "-".

We'll say that some date is mentioned in the Prophecy if there is a substring in the Prophecy that is the date's record in the format "dd-mm-yyyy". We'll say that the number of the date's occurrences is the number of such substrings in the Prophecy. For example, the Prophecy "0012-10-2012-10-2012" mentions date 12-10-2012 twice (first time as "0012-10-2012", second time as "0012-10-2012-10-2012").

The date of the Apocalypse is such correct date that the number of times it is mentioned in the Prophecy is strictly larger than that of any other correct date.

A date is correct if the year lies in the range from 2013 to 2015, the month is from 1 to 12, and the number of the day is strictly more than a zero and doesn't exceed the number of days in the current month. Note that a date is written in the format "dd-mm-yyyy", that means that leading zeroes may be added to the numbers of the months or days if needed. In other words, date "1-1-2013" isn't recorded in the format "dd-mm-yyyy", and date "01-01-2013" is recorded in it.

Notice, that any year between 2013 and 2015 is not a leap year.

Input

The first line contains the Prophecy: a non-empty string that only consists of digits and characters "-". The length of the Prophecy doesn't exceed 10^5 characters.

Output

In a single line print the date of the Apocalypse. It is guaranteed that such date exists and is unique.

Examples

input
777-444--21-12-2013-12-2013-12-2013---444-777
output
13-12-2013