I am a Calendar

Description

Write a program that can read a date format yyyy/mm/dd or ROC yyy/mm/dd (中華民國紀元).

Then print it in a form of day name in the week, month name, date and year (AD).

The input range is only between 2021/1/1~2023/12/31. Just ignore the lunar year.

Input

As mentioned above,

the input may beyyyy/mm/dd or ROC yyy/mm/dd (中華民國紀元)

Output

Output with a line "month day, year (weekday)"

- month ∈ "January", "February", "March", "April", "May", "June", "July", "August", "September", "October", "November", "December"
- 01 <= day <= 31 (the date of the month), if is less than 10, should add 0-prefix
- 2021 <= year <= 2023 (year)
- weekday∈ "Sunday", "Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday"

The endline is needed.

Sample Input 1 🖺

2023/1/9

ROC 112/1/8

Sample Input 3 🖹

Sample Input 2 🖺

ROC 111/12/31

Sample Output 1

January 09, 2023 (Monday)

Sample Output 2

January 08, 2023 (Sunday)

Sample Output 3

December 31, 2022 (Saturday)





