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## Easter Sundays

P35547\_en

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Easter Sunday is a mobile holiday corresponding to the first Sunday after the first full moon of the spring. Write a program to compute the day  $D$  and the month  $M$  of the Easter Sunday of every given year  $Y$ .

Below,  $:=$  indicates assignment,  $\text{div}$  indicates integer division, and  $\text{mod}$  indicates the remainder of the integer division. To solve this problem, use the Gauss method:

- Compute
  1.  $k := Y \text{ div } 100$
  2.  $x := Y \text{ mod } 19$
  3.  $b := Y \text{ mod } 4$
  4.  $c := Y \text{ mod } 7$
  5.  $q := k \text{ div } 4$
  6.  $p := (13 + 8k) \text{ div } 25$
  7.  $y := (15 - p + k - q) \text{ mod } 30$
  8.  $z := (19x + y) \text{ mod } 30$
  9.  $n := (4 + k - q) \text{ mod } 7$
  10.  $e := (2b + 4c + 6z + n) \text{ mod } 7$
- If  $z + e \leq 9$ , then  $D := 22 + z + e$  and  $M := 3$ .
- Otherwise, if  $z = 29$  and  $e = 6$ , then  $D := 19$  and  $M := 4$ .
- Otherwise, if  $z = 28$  and  $e = 6$  and  $x > 10$ , then  $D := 18$  and  $M := 4$ .
- Otherwise,  $D := z + e - 9$  and  $M := 4$ .

### Input

Input consists of several natural numbers between 1800 and 9999.

### Output

Print the day and the month of the Easter Sunday of each year.

#### Sample input

2006  
1999

#### Sample output

16/4  
4/4

### Problem information

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