Problem 4 | **72 Points**

What's the Date?

Program Name: date.java **Input File: date.in**

Given the current date and the number of days until a person turns 18, display the date of that person's 18th birthday.

To do this, you'll need to know the number of days in each month. Since February only has a 29th day on leap years, you also need to know the algorithm for determining whether or not a given year is a leap year.

Number of days in each month:

January	31
February	28 (29 on a leap year)
March	31
April	30
May	31
June	30
July	31
August	31
September	30
October	31
November	30
December	31

A year is a leap year if it is either: a) evenly divisible by 400 or b) divisible by 4 and **not** divisible by 100. For example, 1976 is a leap year because 4 divides it and 100 doesn't. 1900 is not a leap year because 400 doesn't divide it and 100 does, and 2000 is a leap year because 400 divides it.

Input

The first line will contain a single integer *n* indicating the number of birthdays that will need to be calculated. Each of the next *n* lines will contain a first name, the long form of a start date (i.e., <month> <day>, <year>), and a positive integer representing the number of days between the start date and the date the person turns 18.

All input dates will fall between years 1900 and 2100, and the number of days will always be less than 10,000.

Output

For each person listed in the input, display on a single line a sentence declaring the date of the person's 18th birthday by printing, "`<name>'s 18th birthday is on <month> <day>, <year>`".

Example Input File

```
3
Bob January 23, 2005 365
James January 1, 1990 1662
Tim May 18, 2003 1
```

Example Output To Screen

```
Bob's 18th birthday is on January 23, 2006
James's 18th birthday is on July 21, 1994
Tim's 18th birthday is on May 19, 2003
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