A PROGRAMMER'S BIRTHDAY

You are celebrating your 18th birthday with some of your closest friends. Since it is your birthday, you say to your friends that you lived exactly 18 years. After you say that, your friends starts to wonder how much time he lived and tries to calculate it with a pen and paper. As the Spiderman of the computer world, you programming-sense stars to tingle, this calculation can be made by a computer more efficiently! When you get to the home, you start to implement a Date class which you designed in your head during the rest of the birthday party as every true programmer would do.

These are the things you implemented in your Date class:

- 1) Your class has exactly three private property of type int to hold day, month and year. As you wanted them to be human readable you designed you entire class such a way that the day is never more than 30 and the month is never more than 12. (Of course, since you are not an astronomer who specialized in calendar making, you assumed that a month is always 30 days.)
- 2) Your class has a default constructor which sets the date to your own birthday.
- 3) Your class has a constructor which takes three parameter for each of the properties. But to make your program more robust, you kept the limits of the properties in your mind.

```
Date d = new Date(32, 13, 2014);

//sets the day to 2

//sets the month to 2

//sets the year to 2015

Date d = new Date(0, 8, 2003);

//sets the day to 30
```

//sets the month to 7 //sets the year to 2003

- 4) Your class has a final constructor which takes only the number of days which works similar to the pervious constructor. Since adding days on top of the birth of Christ would be impractical, this constructor adds them on top of the date 30.12.1999 to be more useful.
 - 5) Your class has the static add and sub functions to be able to make some calculations.

```
Date d1 = new Date(13, 6, 1000);
Date d2 = new Date(7, 10, 1000);
Date d3 = Date.add(d1, d2);
//d3 is 20.04.2001
```

6) Finally, your class has a toString function to be able to print out the results. It puts leading zeros only to the day and the month if necessary. (**Example:** 07.10.1995 or 24.02.512)

Now only thing left for you to do is preparing a main method which will read the current date and his birthday from the user and then will print how much time he lived to the screen. Hopefully, your friend will be grateful to you for making such a clever program possible.