Problem Set 1 Exercise #19: Leap Year

Reference: Lecture 3 notes

Learning objectives: Selection statements; Writing Boolean methods

Estimated completion time: 20 minutes

Problem statement:

Write a program PS1_Ex19_LeapYear.java to determine whether an input year is a leap year.

A year is a leap year if

- it is divisible by 4 but not by 100; or
- It is divisible by 400

Examples of leap year include 2004, 1980, 2000 and 2400.

Examples of non-leap year include 1997, 2006 and 2200.

Your program should contain a method

```
boolean isLeapYear(int year)
```

that returns **true** if the given year is leap year, or **false** otherwise.

Sample run #1:

```
Enter year: 2000
2000 is a leap year
```

Sample run #2:

```
Enter year: 2100
2100 is not a leap year
```