Exercise SDJ1

Exercise: MyDate, version 5

```
MyDate
- day : int
- month: int
- year : int
+ MyDate(day: int, month: int, year: int)
+ MyDate()
+ set(day: int, month: int, year: int): void
+ getDay():int
+ getMonth(): int
+ getYear():int
+ getMonthName(): String
+ isLeapYear(): boolean
+ stepForwardOneDay(): void
+ stepForward(days : int) : void
+ numberOfDaysInMonth(): int
+ isBefore(other : MyDate) : boolean
+ yearsBetween(other: MyDate): int
+ toString(): String
```

Create a new module and name it MyDate v5 copying the files from MyDate v4 (or MyDate v3)

Modify class MyDate:

a) Add a zero-argument constructor setting the date to today's date.

Hint: Use the following code as a guideline for how to get the current date.

```
import java.time.LocalDate;
public class CalendarTest
{
   public static void main(String[] args)
   {
     LocalDate today = LocalDate.now();

     System.out.println("Day = " + today.getDayOfMonth());
     System.out.println("Month = " + today.getMonthValue());
     System.out.println("Year = " + today.getYear());
   }
}
```

Note that the zero-arguments constructor sets the three instance variables and do NOT print out.

b) Add a method stepForward updating the date to a new date a number of days in the future. The number of days is given as argument. Hint: the easiest solution is to make a loop and call method stepForwardOneDay in the loop body.

Modify the test application named MyDateTest such that you demonstrates class MyDate's new capabilities.