

Exercises session 1, SDJ1

Exercise 1.05 – Testing a MyDate class (from the RentalCompany-code)

- Download the file <http://ict-engineering.dk/jar/RentalCompany.jar> to a folder on your computer
- Open IntelliJ, click the Project (e.g. named A20) and use menu File→New to create a new Module with the name `Exercisel_05`
- Create in this module (click the `src` folder first) a class called `DateTest` with a main method.
- Setup IntelliJ to get access to the downloaded file, the following way:
 - File (top menu) → Project Structure...
 - Libraries → + [Click + in the top of the second compartment – and Select] Java
 - [Navigate to the folder with the downloaded file: `RentalCompany.jar` and select the file]
 - [Choose the Module] `Exercisel_05` → OK
- In your class file, In line 1 (before: `public class DateTest`), write the following statement:
`import rentalcompany.model.*;`
- The following statements creates the date 23/1/1996 (release date for Java 1.0) and prints it out:
`MyDate dateForFirstJavaRelease = new MyDate(23, 1, 1996);`
`System.out.println("Java1 date: " + dateForFirstJavaRelease);`

The output is:

```
Java1 date: 23/01/1996
```

Use the above as basis to write statements (in the body of your main method) to create and print out a date with your birthday. Name the `MyDate` variable `birthday` and not as in the above statements `dateForFirstJavaRelease` – and find a proper text in the print statements.

- The following statements calculates the number of days between today and the date 23/1/1996 and print it to the screen:
`MyDate date1 = new MyDate(23, 1, 1996);`
`MyDate today = new MyDate();` // today's date
`int days = date1.daysBetween(today);` // calling a method
`System.out.println("Days since first Java release: " + days);`

The output (when running it 2/9/2020) is:

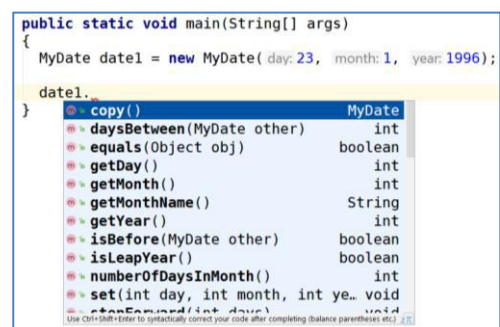
```
Days since first Java release: 8989
```

Use the above as basis to write statements (in the body of your main method) to calculate and print out your age in days.

- In the `MyDate` class there is a method `yearsBetween` to be used the following way:
`int years = date1.yearsBetween(date2);`
Use this method to calculate and print out your age (from your birthday and today's date).

- OPTIONAL: Call some of the other methods in `MyDate` to get a feeling what you can do with a `MyDate` object.

In IntelliJ, you can see which methods are available. When you type the dot after the `MyDate`-variable a popup with methods appears (if not, then Ctrl+Space after the dot).



Documentation: <http://ict-engineering.dk/javadoc/RentalCompany/rentalcompany/model/MyDate.html>