

## Homework 4 : MyDate class

In this homework, you will implement MyDate class. This class is used to represent a specific date in time. It has also methods to update the date and compare the date with another date as shown in the following test class (Main.java). You are given the following Main class which will be used to test the behaviour of your implementation.

```
public class Main {

    public static void main(String[] args) {

        MyDate date = new MyDate(28,2,2017);

        String strRep = date.toString();
        System.out.println(strRep);
        //Expected output: 2017-02-28

        date.incrementDay();
        System.out.println(date.toString());
        //Expected output: 2017-03-01

        date.incrementYear(3);
        System.out.println(date.toString());
        //Expected output: 2020-03-01

        date.decrementDay();
        System.out.println(date.toString());
        //Expected output: 2020-02-29

        date.decrementYear();
        System.out.println(date.toString());
        //Expected output: 2019-02-28

        date.decrementMonth();
        System.out.println(date.toString());
        //Expected output: 2019-01-28

        date.incrementDay(3);
        System.out.println(date.toString());
        //Expected output: 2019-01-31
```

```

        date.decrementMonth(2);
        System.out.println(date.toString());
        //Expected output: 2018-11-30

        date.decrementDay(30);
        System.out.println(date.toString());
        //Expected output: 2018-10-31

        date.incrementMonth(16);
        System.out.println(date.toString());
        //Expected output: 2020-02-29

        date.decrementYear(4);
        System.out.println(date.toString());
        //Expected output: 2016-02-29

        date.incrementMonth();
        System.out.println(date.toString());
        //Expected output: 2016-03-29

        date.incrementYear();
        System.out.println(date.toString());
        //Expected output: 2017-03-29

        MyDate anotherDate = new MyDate(28,2,2017);

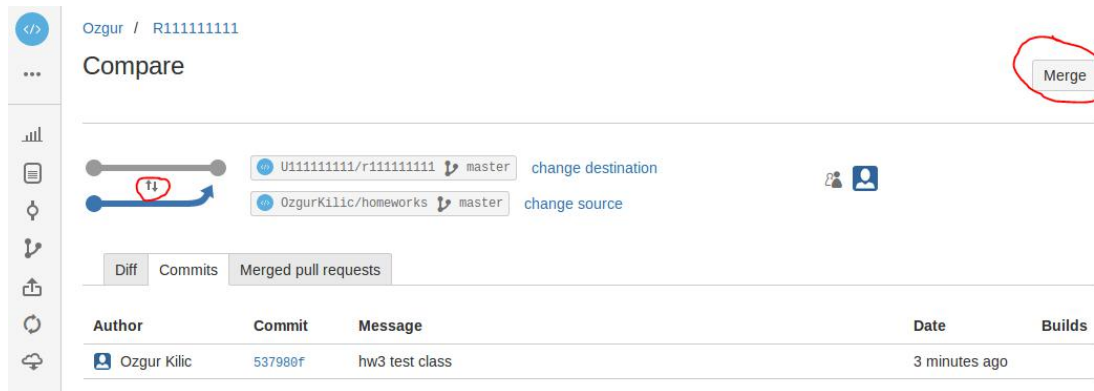
        boolean before = date.isBefore(anotherDate);
        System.out.println(date.toString()+ " is before " + anotherDate.toString()+ " : " + before);
        //Expected output: 2017-03-29 is before 2017-02-28 : false

        boolean after = date.isAfter(anotherDate);
        System.out.println(date.toString()+ " is after " + anotherDate.toString()+ " : " + after);
        //Expected output: 2017-03-29 is after 2017-02-28 : true

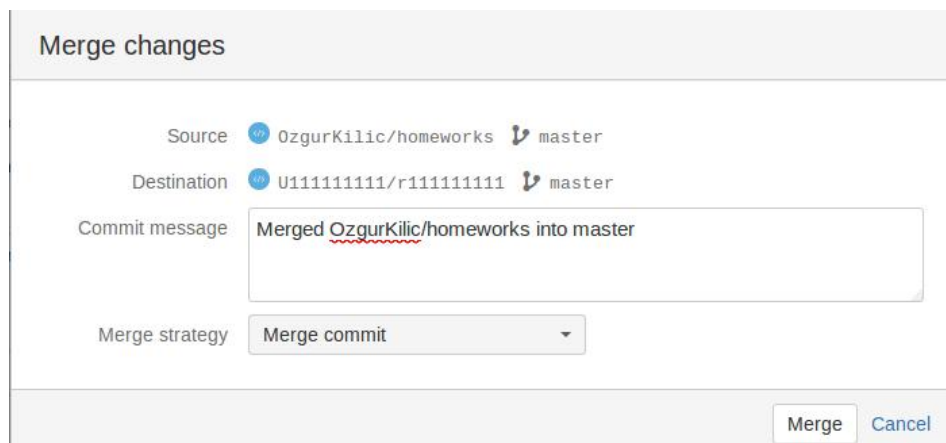
        int dayDiff = date.dayDifference(anotherDate);
        System.out.println("Day difference between " + date.toString()+ " and " + anotherDate.toString()+
" is " + dayDiff);
        //Expected output: Day difference between 2017-03-29 and 2017-02-28 is 29
    }
}

```

Main.java is available in OzgurKilic/homeworks repository. You can merge this repository with your homework (R\*\*\*\*\*) repository in a similar way describe in the setup section of Lab2.pdf. While merging with your homework repository, be sure that OzgurKilic/homeworks is the source repository (you should click the arrows button for this). Then click the Merge button.



Next click the Merge button in the dialog.



To download the Main.java to your computer. Execute the “git pull” command in the **hw4** directory.

```

ozgur@ubuntu: ~/U11111111/R11111111/hw4
ozgur@ubuntu:~/U11111111/R11111111/hw4$ git pull
Password for 'https://U11111111@bitbucket.org':
remote: Counting objects: 15, done.
remote: Compressing objects: 100% (15/15), done.
remote: Total 15 (delta 3), reused 0 (delta 0)
Unpacking objects: 100% (15/15), done.
From https://bitbucket.org/U11111111/R11111111
 55e03d6..39b33a3 master    -> origin/master
Updating 55e03d6..39b33a3
Fast-forward
 hw2/FindOccurrences.java | 42 ++++++
 hw2/matrix.txt           | 10 +++++
 hw3/FindSequence.java    | 53 ++++++
 hw3/matrix.txt           | 10 +++++
 hw4/Main.java            | 77 ++++++
 5 files changed, 192 insertions(+)
 create mode 100644 hw2/FindOccurrences.java
 create mode 100644 hw2/matrix.txt
 create mode 100644 hw3/FindSequence.java
 create mode 100644 hw3/matrix.txt
 create mode 100644 hw4/Main.java
ozgur@ubuntu:~/U11111111/R11111111/hw4$

```

Note that in your implementation **you are not allowed to use any Date or Calendar class** available in java or in any library.

**Due date: 05.03.2018 13:30**

**Submission:**

Submit your homework as defined in HomeworkSubmission document. Your java file should be located in the “**hw4**” directory in your repository. Failing in any step described in the document may affect your grade. The document is available in the Homework section of the Resources tab of the course piazza web page.