Task 8

Write static functions operating on and returning **String**s:

```
1    public static String norm(String name)
2    public static String init(String name)
3    public static String tr(String s, String from, String to)
```

where

- the first returns a string which is similar to `name`, but the first letter is always in upper case and all the remaining characters are in lower case (e.g., `"jOhN"` → `"John"`);
- the second takes a full name, i.e., first name, optionally a middle name, and the lastname, separated by exactly one space; it returns a string in which first and middle name are replaced by the initials (upper case, with a dot after the letter), and the last name starts with a capital letter with all the remaining letters in lower case (e.g. `"john richard doe"` → `"J. R. Doe"`). Note: method **split** from class **String** splits a string into parts separated by a separator which is passed as an argument and returns them as an array of **String**s, e.g., after

    ```
    String[] a = "abc def ghi".split(" ");
    ```

    the array `a` will contain three elements: `"abc"`, `"def"` and `"ghi"`.
- the third returns a **String** in which all characters from `s` that are present in `from` are replaced by the corresponding (on the same position) characters from `to`. For this to make sense, all characters in `from` must be different and `from` and `to` should be of the same length. For example, if `from` is `"abc"` and `to` `"XXY"`, then all occurrences of 'a' and 'b' should be replaced by 'X' and 'c' by 'Y'.

For example, the program

download *StringMisc.java*

```java
public class StringMisc {
    public static String norm(String name) { ... }
    public static String init(String name) { ... }
    public static String tr(String s,
                            String from, String to) { ... }

    public static void main (String[] args) {
        System.out.println(norm("caravaggio"));
        System.out.println(norm("VERMEER"));

        System.out.println(init("johann sebastian bach"));
        System.out.println(init("i. babeL"));
        System.out.println(init("jorge LUIS BORGES"));
```

```java
        System.out.println(init("WOLFGANG a. mozart"));

        System.out.println(tr("Mississippi",
                    "abcdefghijklmnopqrstuvwyz",
                    "BCDEFGHIJKLMNOPQRSTUVWYZA"));
        System.out.println(tr("abcXYZ","aZcX","||Cx"));
    }
}
```

should print

```
Caravaggio
Vermeer
J. S. Bach
I. Babel
J. L. Borges
W. A. Mozart
MJTTJTTJQQJ
|bCxY|
```

Do not use any classes except those in the package *java.lang*.

Deadline: Jun 3 (inclusive)

Put yout Java file(s), and only Java files, in a directory the name of which is your surname (without Polish or any other non-ASCII characters). Names of Java files are arbitrary, although of course they should correspond to names of classes you created. Zip the whole directory ("from above" — not just the files inside it). Then drop the zip file created in this way into folder "Tasks / Task_XX" of the GAKKO system (where 'XX' is the task number).