Assignment 1

• create a downloader of images from web
  – a program that
    • obtains a URL as a command line parameter
    • downloads the URL (suppose that it is a html page)
    • downloads all the referenced images from the page
      – use regular expressions for finding images
        • <img src="...." />

• e.g., test the program on the web of the course
Assignment 2

• Create a program that prints a simple “formatted! calendar for a given month
  – no arguments – for the current month
  
  December 2020
  Su Mo Tu We Th Fr Sa
  1   2   3   4   5
  6   7   8   9  10  11  12
  13  14  15  16  17  18  19
  20  21  22  23  24  25  26
  27  28  29  30  31

  – with arguments – month year (e.g. 1 2017)
  
  January 2017
  Su Mo Tu We Th Fr Sa
  1   2   3   4   5   6   7
  8   9  10  11  12  13  14
  15  16  17  18  19  20  21
  22  23  24  25  26  27  28
  29  30  31
Assignment 3

• implement parallel downloading to the downloader (Assignment 1)
  
  - choose a suitable implementation
    • via threads or tasks for an executor or...
  
  - limit a number of used threads
    • e.g., by number of available processors
Tests...
Test 1

- Is it possible (without usage of the reflection API) to create another instance of the class (i.e. a different instance than in the field INSTANCE)?

```java
public class Dog implements Serializable {

    public static final Dog INSTANCE = new Dog();

    private Dog() {
    }

    public String toString() {
        return "Woof";
    }

}
```