Exercise 5.1

Question 1

```
# OS:   Mac OS X; 10.9.5; x86_64
# JVM:  Oracle Corporation; 1.8.0_20
# CPU:  2,3 GHz Intel Core i7
# RAM:  16 GB 1600 MHz DDR3
# Date: 2014-09-26T10:20:13+0200
countSequential                  12682,3 us     574,48         32
9592.0
countParTask1     32              5685,7 us     733,98         64
9592.0
countParTask2     32              5015,9 us     239,13         64
9592.0
countParTask3     32              4339,1 us     247,44         64
9592.0
```

Question 2

```
# OS:   Mac OS X; 10.9.5; x86_64
# JVM:  Oracle Corporation; 1.8.0_20
# CPU:  2,3 GHz Intel Core i7
# RAM:  16 GB 1600 MHz DDR3
# Date: 2014-09-26T10:18:00+0200
countSequential                  12536,9 us     797,52         32
9592.0
countParTask1     32              3887,8 us      89,64        128
9592.0
countParTask2     32              4243,8 us     293,69         64
9592.0
countParTask3     32              4520,2 us     164,92         64
9592.0
```

Question 3

Interactive graphs:

- CachedThreadPool - countParTask1
- CachedThreadPool - countParTask2
- WorkStealingPool - countParTask1
- WorkStealingPool - countParTask2

(Static images and data points can be found in the `benchmarks` folder)

Question 4

The execution times are almost the same on our machine. It seems the thread version runs the

fastest with a count up to 8 (the machine has 8 cores). After 8 it seems like the numbers are almost the same. The small variations are too small to give a proper answer. Comparison

Question 5

Exercise 5.2

Question 1

Question 2

Question 3

Question 4

Question 5

Exercise 5.3

Question 1

Runs: 1. 12.933446358 2. 11.08861516 3. 8.806998804 4. 11.117534792 5. 7.94627111

Question 4

A parallel run of tasks is only as past as the slowest executed task. This means if 22 of the urls take 1 second to execute and the last takes 3 seconds, then the total execution time will be 3 seconds.

Runs: 1. 2.886404326 2. 1.68489287 3. 1.764366912 4. 1.797240872 5. 1.731433001

Exercise 5.4

Question 1

Question 2

Question 3

We did not manage to get this to work..

Question 4

Question 5