## Christian-Albrechts-Universität zu Kiel

Institut für Informatik

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5. Übung zur Vorlesung "Concurrent and Distributed Programming" Abgabe am Monday, 13. May 2019 - 18:00

## Aufgabe 1 - Sieve of Eratosthenes with gen\_server

1 Punkt

In the lecture, we discussed the gen\_server framework. A good introduction can also be found in learn you some Erlang for great good.

Use this framework to reimplement the implementation of sieve of Eratosthenes. If you did not solve this problem, you can use this solution.

## Aufgabe 2 - Reading from a Remote Channel

1 Punkt

In the lecture we developed a simple implementation for communication over remote channels. Extend this implementation, such that it is also possible, to read from remote channels. Take care, that your implementation provites mobility which means, that a read value can also contain another remote channel.

Reimplement the pingpong example, such that a client reads the pong answer from a channel located on the server.

## **Aufgabe 3 - Linking to Channels**

1 Punkt

Extend the Remote Channel application from the lecture with a linking mechanism. The linking should work in between channels, i.e. if two channels are linked to each other a channel gets a special message, if the other channel is not reachable anymore.