Readers and Writers

Simulate the readers and writer's problem by using a pool of randomly generated threads:

- Each thread should either be a reader or a writer.
- Number of readers simultaneously accessing the DB should be at most 10.
- Number of writers simultaneously accessing the DB should be at most 2.

On every step of simulation, a description of the action should be printed out:

1. *New reader - X.*
2. *Reader X is accessing the DB.*
3. *New writer - Y.*
4. *Writer Y is accessing the DB.*

Also, at all times total number of readers (waiting/active) and writers (waiting/active) should be visible.

Choice of the programming language is not restricted, but usage of *C++* or *Java* is preferred.

The code should be implemented from scratch, without usage of any external help.

Also usage of readily available code snippets (except for book) is forbidden.

Any violation of this rule will be penalized or reported as honor code case.

Deadline 15.04.2019.