**Formal verification**
**SEREs**
CERN training - July 2025

## Timer

Take the timer you have been working on, and add assertions based on SEREs.
You can think of simple assertions mimicking the ones you have in LTL-style, or think about more complex ones embedding a complex behavior.
For instance, it should be possible to describe what is happening to the timer from the moment start is active.

## Elevator

Take the elevator you have been working on, and add assertions based on SEREs.
For instance, in v2 of the elevator, if it is closed on floor 0, and we press on the button of floor 1, then we should observe the elevator going up and stay at least 10 cycles open there. As it will maybe be quite close to the LTL-style assertions, we could take the opportunity to use sequences for coverage.
We could think of coverage of the elevator starting from floor 0, going to floor 1, then going back to floor 0. (This is just an idea, feel free to experiment).