CS303 PRE-LAB 4 ASSIGNMENT

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Part 1

In sources you can find two files. The first one is mod7\_calculator\_part1.v which defines the part1 module. Inside this module, the part 2 function is called which is defined in counter\_part2.v.

The out is set to 0 initially so that even if the reset is not done, the module works correctly.

At every posedge of cnt\_out or reset, reset is checked. If reset is not set, then the modulus operation is done.

Part 2

This module is called inside Part 1 module. At every posedge of clk or reset, reset is checked and if it is set, then the counter is set to 0. Otherwise, counter is set to a value according to the ones in the lab4 instructions.

Also, at every posedge of cnt\_out, led value is changed. If it was 0, it is changed to 1, and vice versa.