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## 1 Exercise 1

## 1.1 Implement a stopwatch (modulo 16) with the arty7 board

The Arty7 board has 4 LEDs that could be used as a display counter (0 -> 15) and at least three buttons that could be used with the following functions:

- 1. START
- 2. STOP
- 3. RESET

Implement a stopwatch able to display seconds (0->15) with 4 LEDs

## 1.1.1 Useful links

- 1. Arty7 schematic https://reference.digilentinc.com/\_media/reference/programmable-logic/arty/arty\_sch.pdf
- 2. Arty7 Master xdc (constraints) https://github.com/Digilent/digilent-xdc/blob/master/Arty-A7-35-Master.xdc

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