Tutorial 5: Binary Clock

Goals

You can find, read and understand data sheets. You can build advanced circuits on a breadboard. You can write well structured programs for the Arduino.

Exercise

Build a binary clock based on the Arduino. The elapsed time since the start of the program should be displayed with eight LEDs (six for seconds, two for minutes). Use a shift register (**SN74HC595N**) to control those LEDs so less pins of the Arduino are used. Your code should be structured so it does not block the program and additional functionality could be executed while the clock is running.