For using Arduino Uno as the programmer and Atmel Studio IDE, do this setup

<https://blog.adafruit.com/2016/08/15/programming-the-arduino-uno-via-the-bootloader-without-programmer-arduinomonday/>

Don’t create new files or folders in the Windows Explorer, instead always create them inside Atmel Studio in the Solution Explorer window.

Reference for timers

<https://alselectro.wordpress.com/2017/08/15/avr-self-learning-timer1-interrupts/>

AVR Context Switch

32 general purpose registers  
Status register  
PC  
SPH and SPL