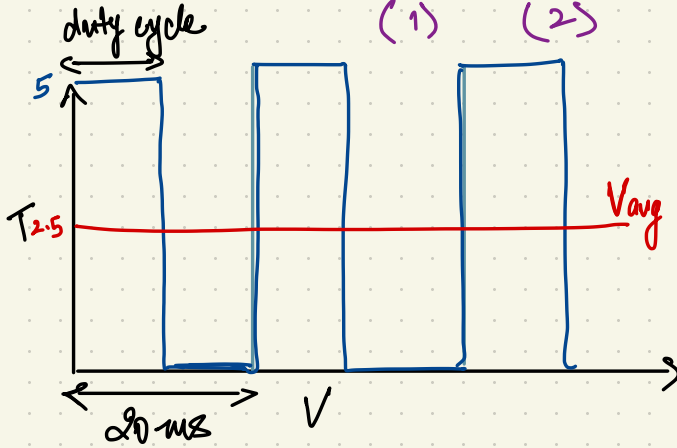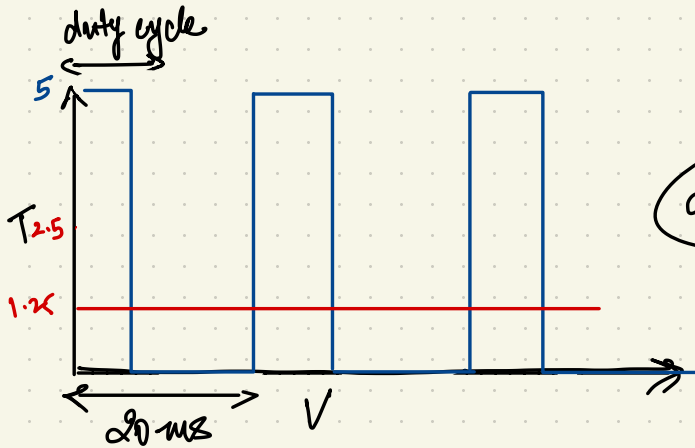# PWM

↳ using this, we can create analog voltages from (digital pins)

→ either ON or OFF
(1)   (2)

50 %
duty cycle

20% duty cycle

CODE

analogWrite (pin , ____);

$$V_{out} = \left(\frac{val}{255} \right) \times 5$$

↓
max

⟶ max. voltage
of arduino.

$$Duty\ cycle = \left(\frac{val}{255} \right) \times 100$$