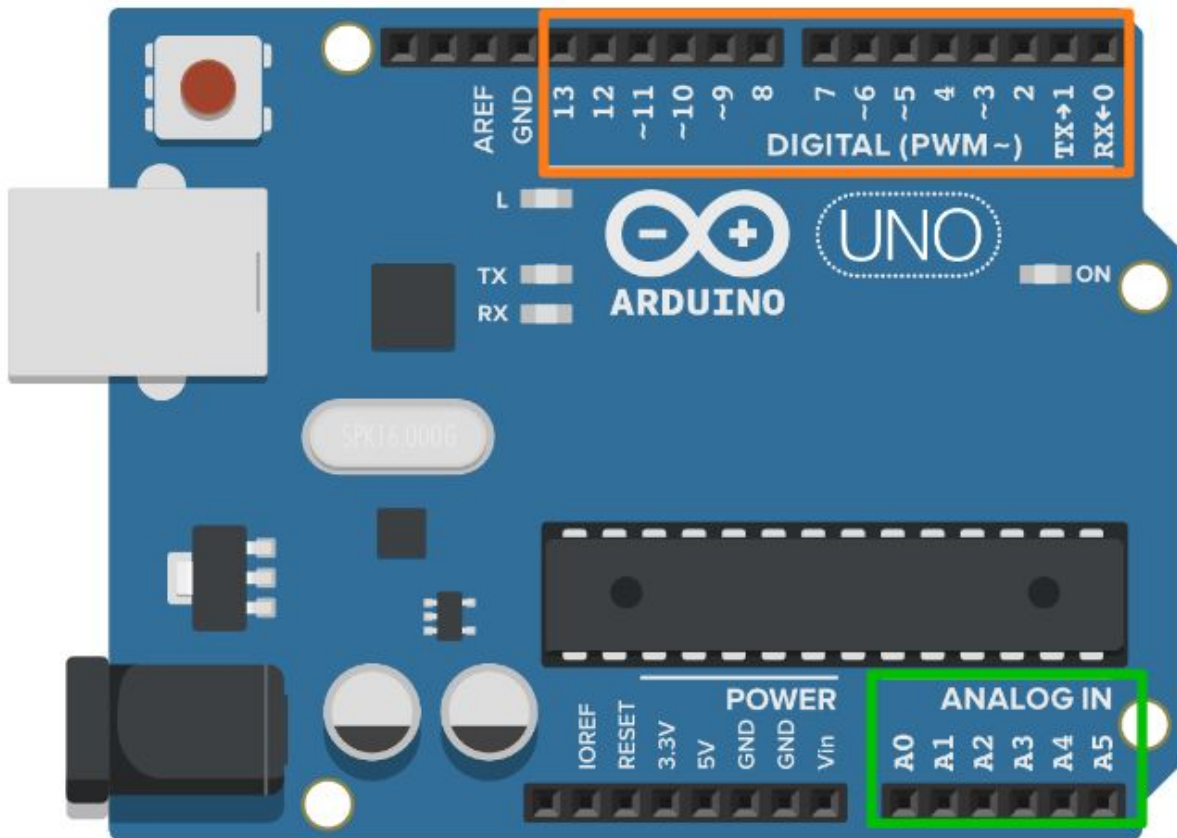


# Arduino Pins - Recap

## (*Arduino For Beginners Course*)



On Arduino Uno, you get:

- 14 digital pins (orange)
- 6 analog pins (green)

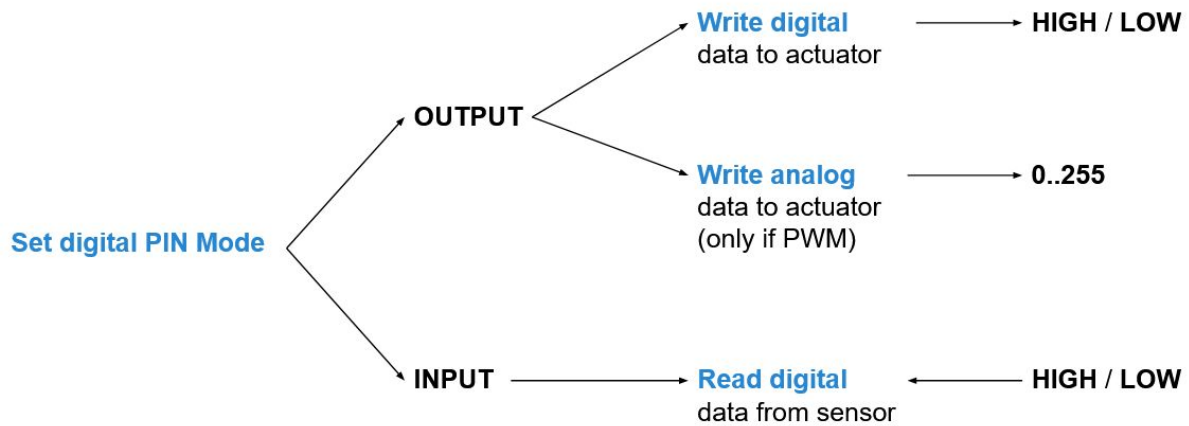
## Digital Pins

Digital pins are used to read/write digital values (which are binary values: HIGH/LOW or 1/0).

For any given digital pin on the Arduino, you can decide to set it as INPUT or OUTPUT, with the `pinMode(pin_number, mode)` function.

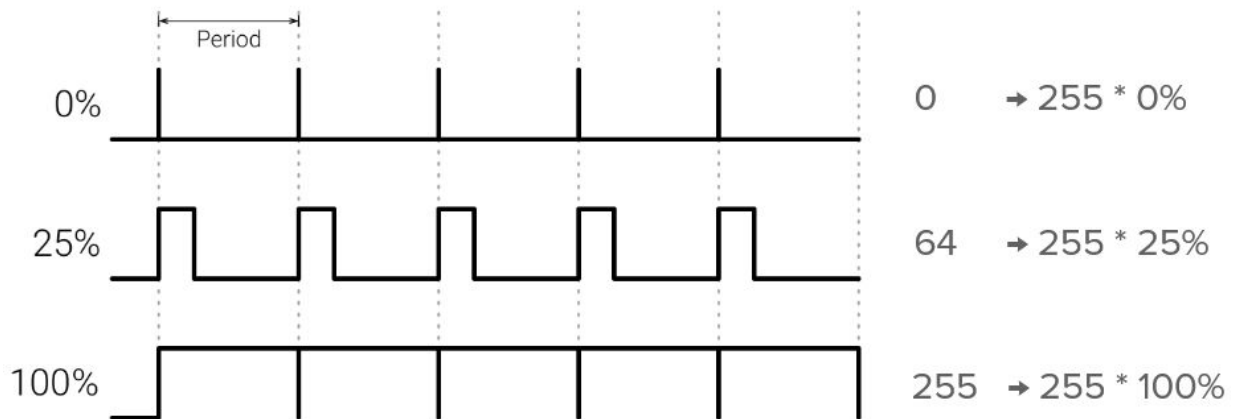
Then:

- For INPUT pins, you can read the state of the pin with *digitalRead(pin\_number)*
- For OUTPUT pins, you can write the state of the pin with *digitalWrite(pin\_number)*



Note:

- For some of the digital pins (with a “~” symbol next to the number on the board), you can use a PWM with the function *analogWrite(pin\_number, value between 0..255)*.



## Analog Pins

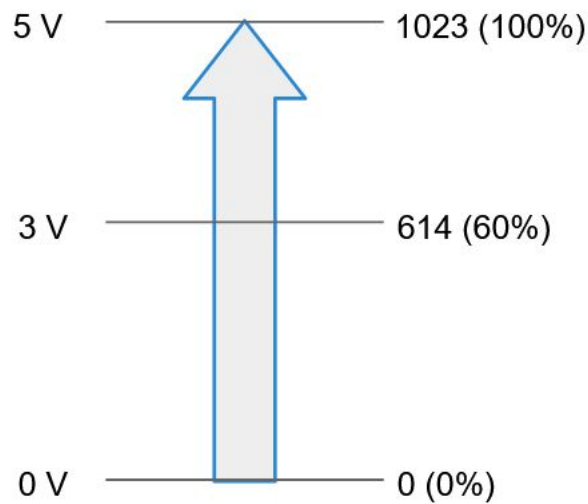
Analog pins are used to read analog values (variation of the voltage between 0 and 5V).

You don't need to set up the mode for an analog input pin, it's already set as INPUT.

Then:

- To read an analog value, you can use `analogRead(pin_number)`, which will convert the analog signal into a digital value between 0 and 1023, that you can use in your code.

### Read an analog value from a sensor



Or:

- You can use any analog pin as a standard digital pin. Very handy when you've already used all digital pins. To do that, don't forget to set the mode for the pin with `pinMode(pin_number, mode)`. Note that you can't use the PWM functionality on analog pins.

