

analogRead(pin)

- Reads the value from a specified analog pin with a 10-bit resolution.
- This function only works on the analog in pins (0-5).
- The resulting integer values range from 0 to 1023.

```
value = analogRead(pin);           // sets 'value' equal to 'pin'
```

Note: Analog pins unlike digital ones, do not need to be first declared as INPUT nor OUTPUT.

analogWrite(pin, value)

- Writes a pseudo-analog value using hardware enabled pulse width modulation (PWM) to an output pin marked PWM.
- On newer Arduinos with the ATmega168 chip, this function works on pins 3, 5, 6, 9, 10, and 11.
- Older Arduinos with an ATmega8 only support pins 9, 10, and 11.
- The value can be specified as a variable or constant with a value from 0-255.

```
analogWrite(pin, value);           // writes 'value' to analog 'pin'
```

Serial.println()

- **Serial.println()** prints it with a newline character.

```
Serial.println(analogValue);       // sends the value of 'analogValue'
```

Serial.begin()

- Sets the data rate in bits per second (baud) for serial data transmission.
- For communicating with Serial Monitor, make sure to use one of the baud rates listed in the menu at the bottom right corner of its screen.
- You can, however, specify other rates - for example, to communicate over pins 0 and 1 with a component that requires a particular baud rate.

```
void setup() {  
  
    Serial.begin(9600); // opens serial port, sets data rate to 9600 bps  
  
}
```

```
void loop() {
```

```
}
```