



Basic Robotics

– Robotics Engineering Certification

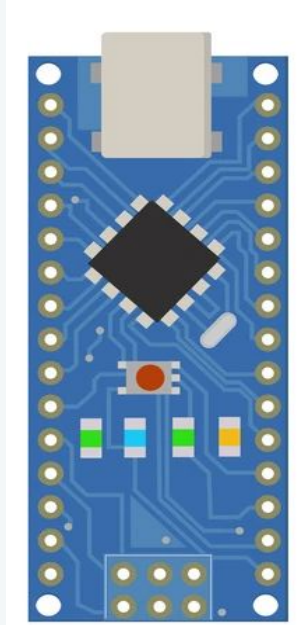
Let's Start the Robotics Journey



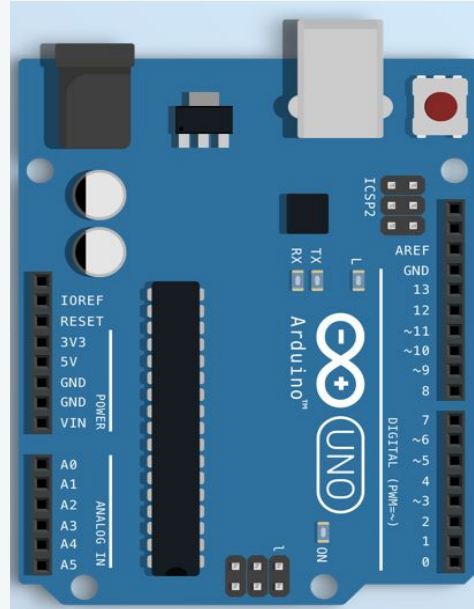
Class 01- Introduction to Arduino & Programming



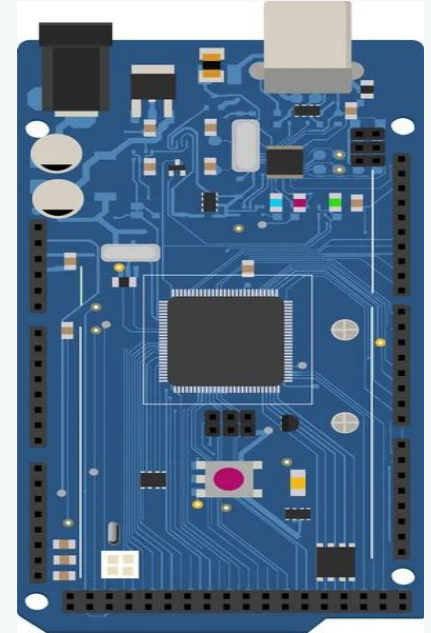
Arduino-Introduction



● Arduino Nano

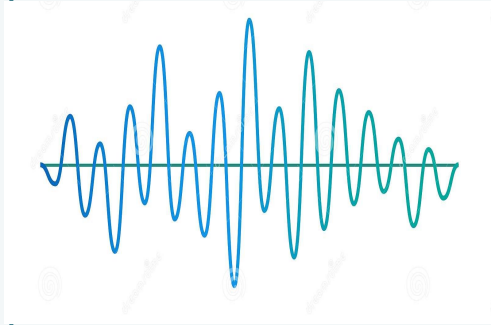


Arduino UNO

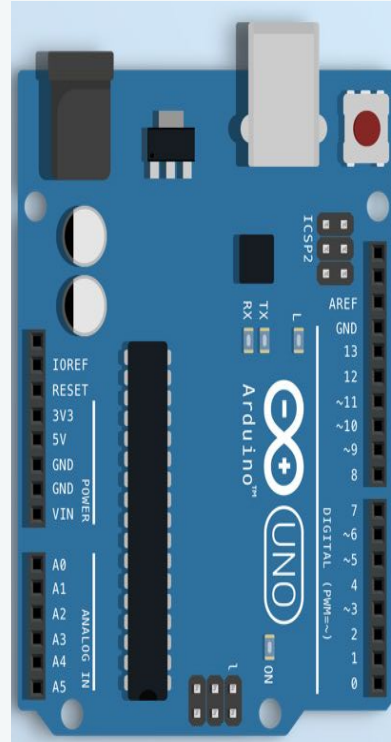
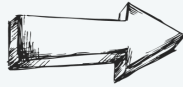


● Arduino Mega ●

Arduino-Introduction



INPUT



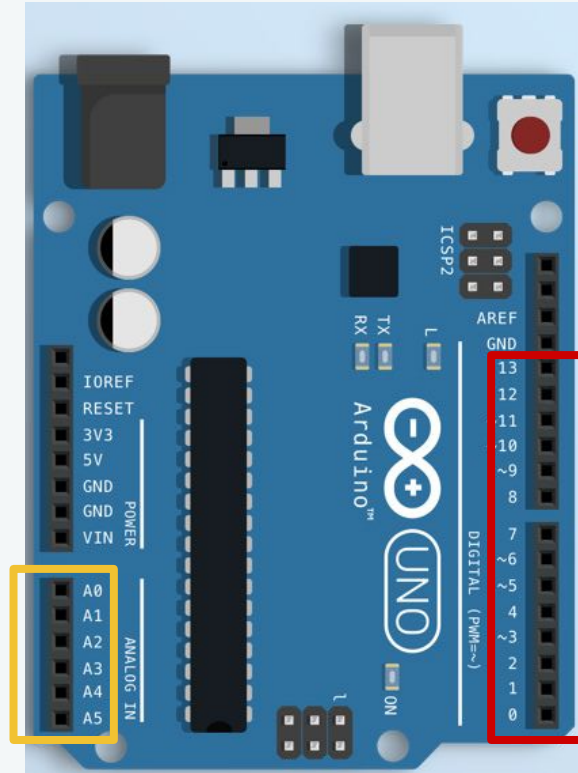
PROCESS



OUTPUT

How does Arduino take INPUT?

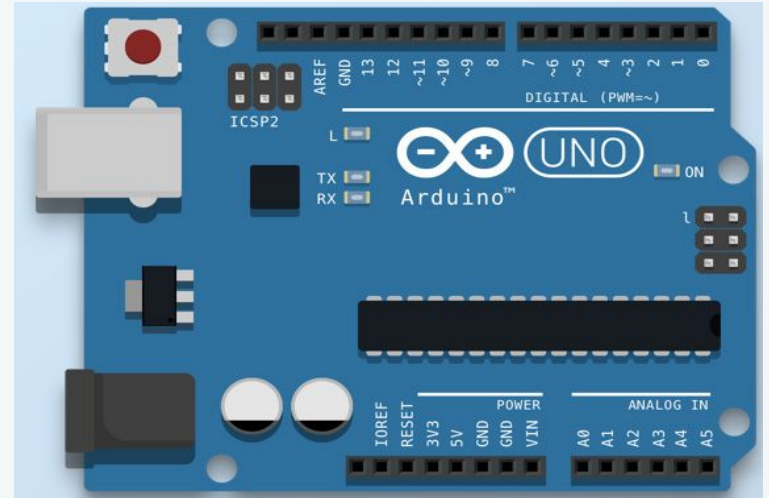
Analog INPUT Pin



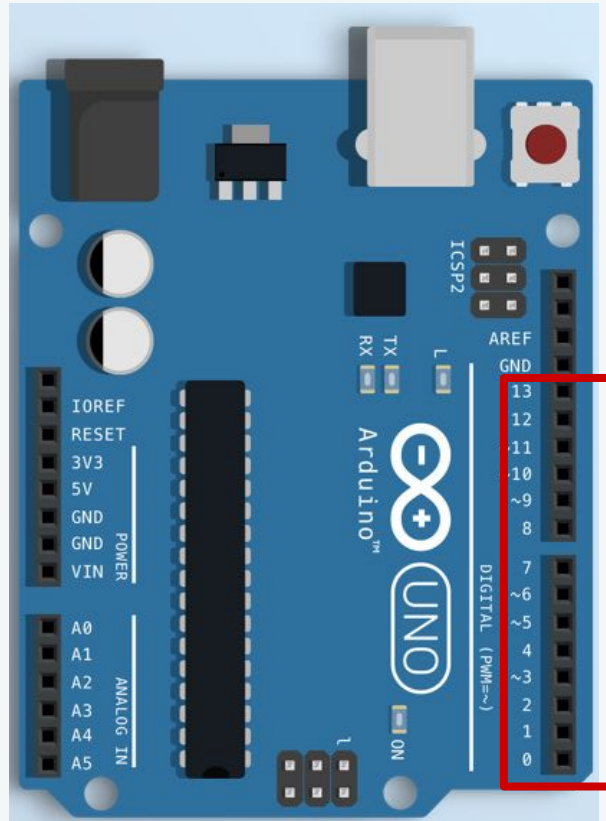
Digital INPUT Pin

How does Arduino PROCESS a data?

- ★ Arduino has its own language similar to C++

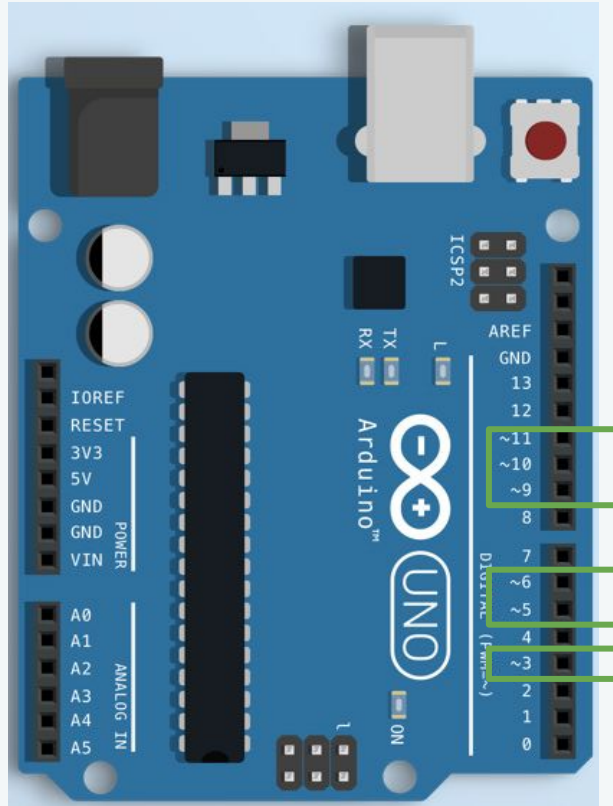


How does Arduino give an OUTPUT?



Digital OUTPUT Pin

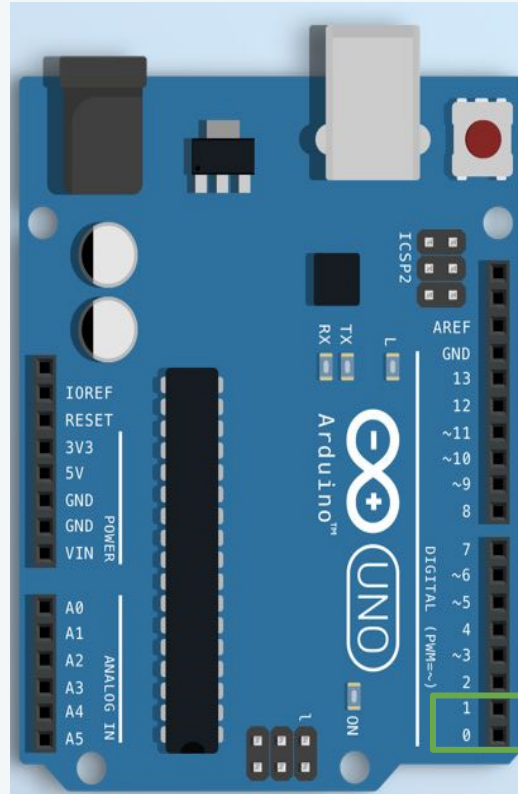
Others Pin of Arduino – PWM Pin



★ Digital Output Pin but acts like an Analog Output pin

PWM Pin
Pulse Width Modulation

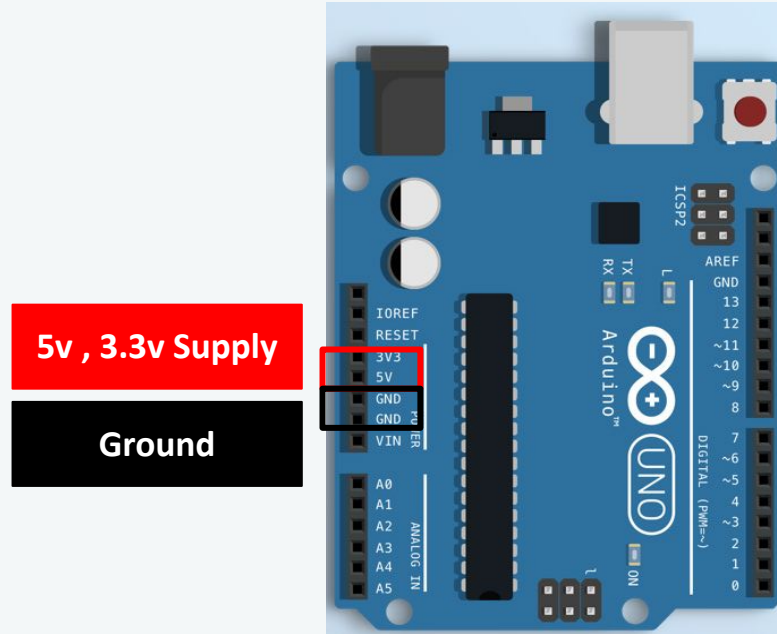
Others Pin of Arduino – Tx/Rx Pin



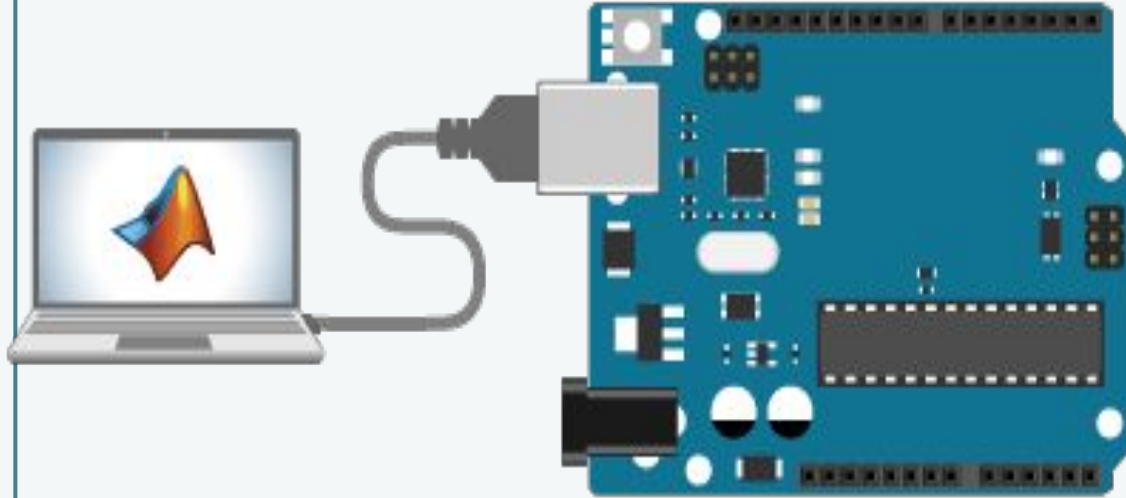
★ Transmit or Receive data

Transmitter Receiver Pin

Others Pin of Arduino – Power Pin



How to POWER UP an Arduino?



By Laptop



By Battery

Recap

- ★ Arduino is a microcontroller unit
- ★ Arduino has its own language to program
- ★ It has several types of pins like digital i/o, analog pin, pwm pin, power pin, tx/rx pin.
- ★ Every pins has its own purpose

QnA

