



Introduction to Arduino



Robotics Club



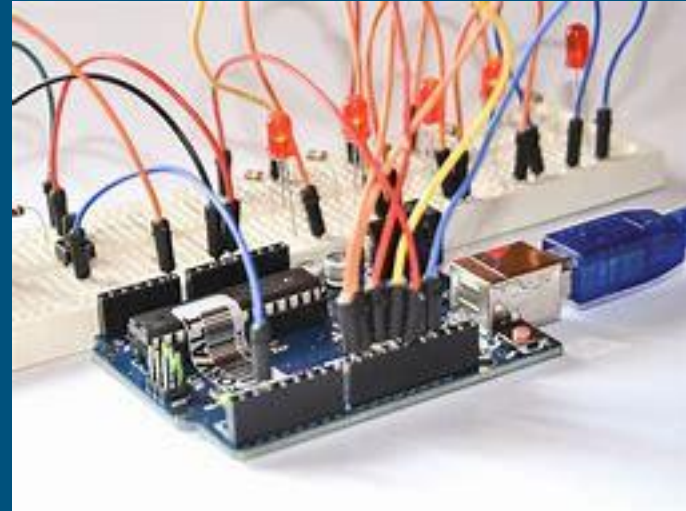
What is Arduino?

- Micro controller
- Kid-friendly programming hardware (for beginners).
- Connects with Scratch software.
- Basis of hardware



What can we do with Arduino?

- Simple actions: light a LED light, make a light pattern, create sounds, read temperature, projecting messages, etc.
- We will be doing these things using scratch mblock programming.



Components needed

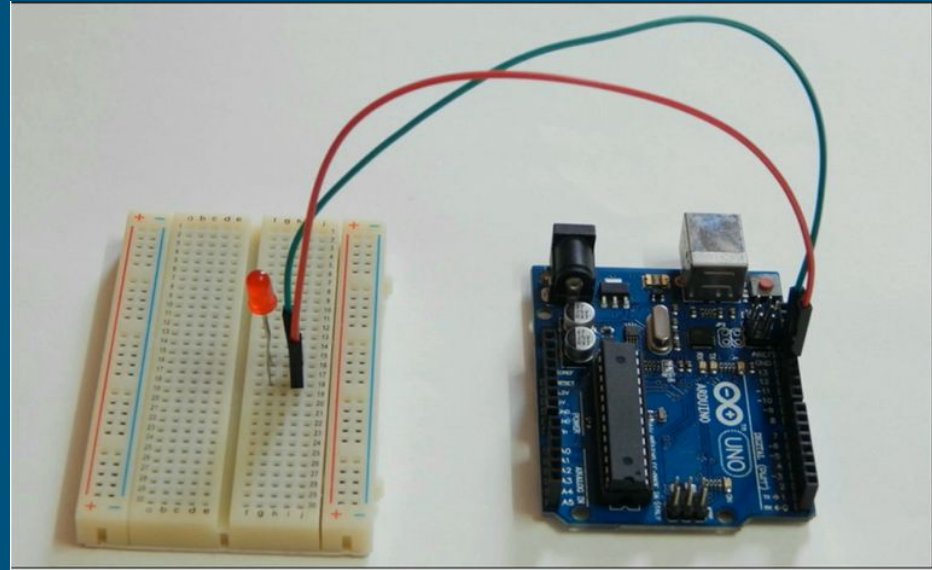
- Breadboard
- LED
- Jumper Wires
- Arduino Board



Turning an LED light on and off - hardware

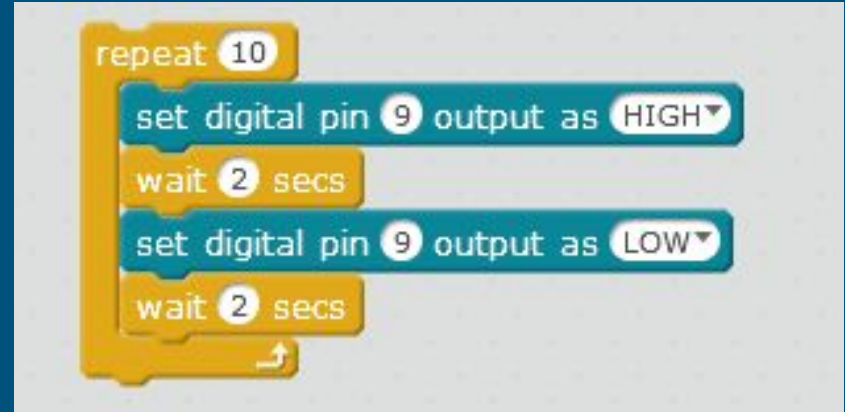
- Arduino board
- LED light
- Breadboard
- Jumper Cable (2 for each light)

Follow the demonstration shown!



Turning an LED light on and off - software

- Set digital pin output high → turn on LED
- Set digital pin output low → turn off LED
- Waiting 2 seconds will help in seeing the change



Make your own pattern!

Create a program to make this circuit:

Light the blue LED for 3 seconds, turn it off, and light the red LED for 2 seconds.