
Title: Blinking LED using Arduino**Objective:**

To create a simple project where an LED blinks on and off at regular intervals using an Arduino.

Required Components:

- Arduino Uno board
- LED
- 220-ohm resistor
- Breadboard
- Jumper wires

Working Principle:

The Arduino controls the LED by sending electrical signals through one of its digital output pins. The LED turns on when the pin provides voltage (HIGH) and turns off when it stops (LOW). A delay is added between these signals to make the LED blink at a visible rate, typically one second on and one second off.

Applications:

- Basic learning project for beginners
- Used to test microcontroller output
- Foundation for more complex timing-based projects