

LED Fade Using Arduino Uno

Abstract—It shows gradual increase and decrease of LED brightness. To achieve that we use analogWrite function. AnalogWrite uses pulse width modulation (PWM), turning a digital pin on and off very quickly with different ratio between on and off, to create a changing brightness.

1 COMPONENTS REQUIRED:

- 1) Arduino board
- 2) LED
- 3) Breadboard
- 4) Wires

2 CIRCUIT CONNECTION:

- 1) Connect the 9 pin of Arduino to positive of the led on breadboard.
- 2) Connect the ground pin of Arduino to negative of the led.

Arduino/IDE/LEDfade/Figures/wiring.jpg

- 3) Go to arduino IDE and Write the the following code

Arduino/IDE/LEDfade/Codes

- 4) Click on Compile and Upload the code to Arduino board.
- 5) Now you can see the variation in the brightness of LED.