07 For

# The circuit


# The code

// Dim an LED using a PWM pin

int LEDPin = 13; //variable storing the pin number the LED is connect to

void **setup**()

{

  pinMode(LEDPin, OUTPUT); //Set the pin the button is attached to as an input

}//End of: setup

void **loop**()

{

  //The for loop... the first value in the brackets is a initialisation

  //an integer value, called i, that starts set equal to zero.

  //The second part is the condition, the loop will keep repeating

  //until the condition is not true. The final part is the increment,

  //each time it loops through the value gets incremented by 1

  for (int i=0; i <= 255; i++){

    analogWrite(LEDPin, i); //Analog write the i value to the LEDPin

    delay(10); //pause for 10 milliseconds

  }

}//End of: loop

# What Next

1. Add another for loop after this one, so the LED slowly dims after it reaches full brightness
2. Print the i value to the terminal inside the for loop so you can see it count up from 0 to 255