**Assignment 2-1: Report**

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**YouTube Links:**

[Assignment 2.1.2: Blinking LED w/ For Loop](https://www.youtube.com/watch?v=WcSBoQS2hMM)

[Assignment 2.1.3: LED PWM Fade](https://www.youtube.com/watch?v=izp3WS2_d0U)

[Assignment 2.1.4: LED Button Control](https://www.youtube.com/watch?v=BYdpcHyN2rE)

[Assignment 2.1.5: LED State Switch](https://www.youtube.com/watch?v=BJkqtSfPk3E)

[Assignment 2.1.6: RGB LED Button Control](https://www.youtube.com/watch?v=-0rp9AIRtmk)

**Images:**

Assignment 2.1.1: Constant LED

A circuit board

Description generated with very high confidence

**Description:**

These set of labs were meant to train us on the basic inputs and outputs used on an AVR chip. Firs, we looked at digital outputs. These are outputs that are simple turned on and off by the microcontroller. Next, we looked at pulse width modulation (PWM) outputs. This allows us to emulate an analog voltage level by modulating square wave at a certain duty cycle. Finally, we looked at digital inputs. This allows us to read a 5 volt or 0 volt signal and use it to perform some function.