Headers are not IEEE style.

## I. Introduction

This lab's purpose is to implement a microcontroller hosted, interrupt-driven program, which the team fulfilled by using an Arduino that powers five LEDS in a row to create the Cylon eyes effect, where the light moves up and down continuously. The project was named *TimeInterrupts* and was developed in the Arduino IDE in C code. The LEDs, breadboard, Arduino system, and 1000 ohm resistors were all provided by Dordt University's Engineering Department.

## II. Method

The team were limited to 1000 ohm resistors because the hardware was assembled at home, meaning lower resistance values were unavailable. The LEDs were installed on the board and faced the same direction without overlapping so that the wiring would not accidentally create a short-circuit. The LEDs were connected through pins 8 through 12 on the Arduino with the GND pin connecting to a common column node. The wiring from the Arduino nodes went to a resistor and then to the rounded side of the LED, and then into the common ground.

There is just enough information here, along with Figure 2, to recreate the circuit. A schematic would have been a more professional and concise way to convey this information.

On the programming side, the team found an Arduino library called MsTimer2 that creates a periodic interrupt which calls the function. In the *TimeInterrupts* code, this MsTimer2 interrupt triggers every 300 ms and calls the *flash* function. This *flash* function works with two variables: *current* and *currentDirection*. The first keeps track of which LED activates next and the following tracks which direction the light path moves. MsTimer2 calls *flash* which turns the

Calls which function? Your reader stumbles here hand has to figure something out that could have been directly stated. (Poor grammar--missing antecedent.)

Your code shows "500 ms." It is sort of an insignificant factual error, but it leaves the reader with a taste of nonchalance that reduces the veracity of the entire report.