/\*Lesson 3 - Introduction to Microcontrollers\*/

//Program Blinking Light Part 1

//One LED w/ one time

/\*

These are the "variables" we will use

A variable is a word that the computer sees as a different value

\*/

int redLed = 9; //The computer sees "redLed" as pin 9

int onTime1 = 1000; //Time LED will turn on

int offTime1 = 1000; //Time LED will turn off

void setup() {

pinMode(redLed,OUTPUT); //Allows Arduino to access red LED

}

void loop() {

digitalWrite(redLed, HIGH); //Red LED is turned on

delay(onTime1); //LED stays on for this amount of time

digitalWrite(redLed, LOW); //Red LED is turned off

delay(offTime1); //LED stays off for this amount of time

}

/\*Lesson 3 - Introduction to Microcontrollers\*/

//Program Blinking Light Part 2

//Two LEDs w/ same times

int redLed = 9; //The computer sees "redLed" as pin 9

int greenLed = 10; //The computer sees "greenLed" as pin 10

int onTime1 = 1000; //Time LED will turn on

int offTime1 = 1000; //Time LED will turn off

void setup() {

pinMode(greenLed,OUTPUT); //Allows Arduino to access green LED

pinMode(redLed,OUTPUT); //Allows Arduino to access red LED

}

void loop() {

digitalWrite(greenLed, HIGH); //Green LED is turned ON

delay(onTime1); //Green LED stays on for this amount of time

digitalWrite(redLed, HIGH); //Red LED is turned ON

delay(onTime1); //Red LED stays on for this amount of time

digitalWrite(greenLed, LOW); //Green LED is turned OFF

delay(offTime1); //Green LED stays off for this amount of time

digitalWrite(redLed, LOW); //Green LED is turned OFF

delay(offTime1); //Red LED stays off for this amount of time

}

/\*Lesson 3 - Introduction to Microcontrollers\*/

//Program Blinking Light Part 3

//Two LEDs w/ varying times

int redLed = 9; //The computer sees "redLed" as pin 9

int greenLed = 10; //The computer sees "greenLed" as pin 10

int onTime1 = 1000; //Time LED will turn on

int offTime1 = 1000; //Time LED will turn off

int onTime2 = 1000; //Time LED will turn on

int offTime2 = 1000; //Time LED will turn off

void setup() {

pinMode(redLed,OUTPUT); //Allows Arduino to access red LED

pinMode(greenLed,OUTPUT); //Allows Arduino to access green LED

}

void loop() {

digitalWrite(greenLed, HIGH); //Green LED is turned ON

delay(onTime1); //Green LED stays on for this amount of time

digitalWrite(redLed, HIGH); //Red LED is turned ON

delay(onTime2); //Red LED stays on for this amount of time

digitalWrite(greenLed, LOW); //Green LED is turned OFF

delay(offTime1); //Green LED stays off for this amount of time

digitalWrite(redLed, LOW); //Red LED is turned OFF

delay(offTime2); //Red LED stays off for this amount of time

}

/\*Lesson 3 - Introduction to Microcontrollers\*/

//Program Blinking Light Part 3

//FOR Loop

int greenLED1 = 9;

int onTime1 = 1000;

int offTime1 = 1000;

//int onTime2 = 1000;

//int offTime2 = 1000;

void setup() {

pinMode(greenLED1,OUTPUT);

}

void loop() {

for(int i = 1; i <= numRedBlink; i++) {

digitalWrite(greenLED1, HIGH);//Turns LED on

delay(onTime1);

digitalWrite(ledRed, LOW);//Turns LED off

delay(redOffTime);

}