// Terran Blake / Lab 2 / 7:30am Wednesday / ECE 241

// Variables will change :

int LedTimer = LOW; // Intiger used to set up LED

int shortTimer = LOW;

unsigned long oldMillis = 0; // will store last time LED was updated

// constants won't change :

const long interval = 20; // How often LED will blink

const long shortinterval = 10;

void setup()

{

// Makes pin 13 as an OUTPUT

pinMode(13, OUTPUT);

pinMode(10, OUTPUT);

}

void loop()

{

// Will use the timer to find whether it is time to blink or not

unsigned long currentMillis = millis();

if(currentMillis - oldMillis >= interval)

{

// save the last time you blinked the LED

oldMillis = currentMillis;

// if the LED is off turn it on and vice-versa:

if (LedTimer == LOW)

LedTimer = HIGH;

PORTB |= 0x10; // Force bit 2, pin 12, high

else

LedTimer = LOW;

// set the LED with the ledState of the variable:

digitalWrite(13, LedTimer);

PORTB &= ~0x10; // Force bit 2, Pin 12, low

//Same idea as the last counter but on a much faster pace and must be tested with Logic Probe

if(currentMillis - oldMillis >= shortinterval)

{

oldMillis = currentMillis;

if (shortTimer == LOW)

{

shortTimer = HIGH;

PORTB |= 0x10; // Force bit 2, pin 12, high

}

else

{

shortTimer = LOW;

}

//Asigns timer to pin

digitalWrite(12, shortTimer);

PORTB &= ~0x10; // Force bit 2, Pin 12, low

}

} //end of loop

} //end of program