// Assignment 2 – Single Line METRO

// This sketch will blink & checkout all of your LED connections;

//Also it has typical defines you can use for the assignment -

//Code for you to cut and paste to test LEDS

// define the pins that the buttons and lights are connected to:

#define eastboundrequestButton 3 // Button Defines

#define westboundrequestButton 13

#define eastboundRed 2 // LED Defines eastbound Red

#define eastboundYellow 1 // is at WEST END

#define eastboundGreen 4

#define westboundRed 12

#define westboundYellow 11

#define westboundGreen 10

#define yellowBlinkTime 500 // 0.5 seconds for yellow light blink

boolean Eastbound = true; // Traffic starts out Eastbound

int flowTime = 10000; // amount of time to let traffic flow

int changeDelay = 1000; // amount of time between color changes

void setup()

{

pinMode(eastboundrequestButton, INPUT);

pinMode(westboundrequestButton, INPUT);

pinMode(westboundRed, OUTPUT);

pinMode(westboundYellow, OUTPUT);

pinMode(westboundGreen, OUTPUT);

pinMode(eastboundRed, OUTPUT);

pinMode(eastboundYellow, OUTPUT);

pinMode(eastboundGreen, OUTPUT);

}

void loop()

{

for ( int a = 0; a < 5; a++ ) // blink eastbound yellow light going to green

{

digitalWrite(eastboundYellow, LOW);

digitalWrite(eastboundRed, LOW);

digitalWrite(eastboundGreen, LOW);

digitalWrite(westboundYellow, LOW);

digitalWrite(westboundRed, LOW);

digitalWrite(westboundGreen, LOW);

delay(yellowBlinkTime);

digitalWrite(eastboundYellow, HIGH);

digitalWrite(eastboundRed, HIGH);

digitalWrite(eastboundGreen, HIGH);

digitalWrite(westboundYellow, HIGH);

digitalWrite(westboundRed, HIGH);

digitalWrite(westboundGreen, HIGH);

delay(yellowBlinkTime);

}

}