Requirements:

1. Write an Arduino program to flash your name in Morse Code using external LEDs.
2. Define and use a procedure called “dash” that does the following:
   1. Flashes a green LED for 750 milliseconds (3/4 second).
   2. Uses a global variable to determine the pin number for the green LED
   3. Uses a parameter variable to determine the number of times to flash the LED.
3. Define and use a procedure called “dot” that does the following:
   1. Flashes a red LED for 250 milliseconds (1/4 second).
   2. Uses a global variable to determine the pin number for the red LED
   3. Uses a parameter variable to determine the number of times to flash the LED.
4. Define and use a procedure called “blank” that does the following:
   1. Turns off both LEDs for 1000 milliseconds (1 second).
   2. Represents a Morse Code space between letters.
5. Demonstrate your completer program to Mr. Nestor
6. Upload your completed program to your repository with the file name “Morse Code Challenge”.

Level Scoring:

* Level 4 – Complete the challenge in 1 day
* Level 3 – Complete the challenge in 2 days
* Level 2 – Complete the challenge in 3 days
* Level 1/R – Do not complete the challenge in 3 days

The code

int GreenLED = 12;

int RedLED = 11;

void setup()

{

pinMode(GreenLED, OUTPUT);

pinMode(RedLED, OUTPUT);

}

void loop()

{

dot(1); dash(3); blank(1); //J

dot(1); dash(1); blank(1); //A

dot(3); dash(1); blank(1); //V

dash(1); blank(1); //O

dash(1); dot(1); blank(1); //N

}

int dash(int times) {

digitalWrite(GreenLED, HIGH);

delay(750);

digitalWrite(GreenLED, LOW);

delay(750);

}

int dot(int times) {

digitalWrite(RedLED, HIGH);

delay(250);

digitalWrite(RedLED, LOW);

delay(250);

}

int blank(int times) {

digitalWrite(GreenLED, LOW);

digitalWrite(RedLED, LOW);

delay(1000);

}