/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

 \* \* Example sketch RGB LED

 \*

 \* Make an RGB LED display a different colors

 \* HOOK UP YOUR COMMON (LONG PIN) TO 5V NOT GND)

 \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

const int RED\_PIN = 9;

const int GREEN\_PIN = 10;

const int BLUE\_PIN = 11;

const int DISPLAY\_TIME = 1000; // used in mainColors() to determine the

// length of time each color is displayed.

void setup() //Configure the Arduino pins to be outputs to drive the LEDs

{

 pinMode(RED\_PIN, OUTPUT);

 pinMode(GREEN\_PIN, OUTPUT);

 pinMode(BLUE\_PIN, OUTPUT);

}

void loop()

{

 mainColors(); // Red, Green, Blue, Yellow, Cyan, Purple, White

 }

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 \* void mainColors()

 \* This function displays the eight "main" colors that the RGB LED

 \* can produce. If you'd like to use one of these colors in your

 \* own sketch, you can copy and paste that section into your code.

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void mainColors()

{

 // all LEDs off

 digitalWrite(RED\_PIN,HIGH);

 digitalWrite(GREEN\_PIN,HIGH);

 digitalWrite(BLUE\_PIN, HIGH);

 delay(DISPLAY\_TIME);

 // Red

 digitalWrite(RED\_PIN,LOW);

 digitalWrite(GREEN\_PIN, HIGH);

 digitalWrite(BLUE\_PIN, HIGH);

 delay(DISPLAY\_TIME);

 // Green

 digitalWrite(RED\_PIN, HIGH);

 digitalWrite(GREEN\_PIN,LOW);

 digitalWrite(BLUE\_PIN, HIGH);

 delay(DISPLAY\_TIME);

 // Blue

 digitalWrite(RED\_PIN, HIGH);

 digitalWrite(GREEN\_PIN, HIGH);

 digitalWrite(BLUE\_PIN, LOW);

 delay(DISPLAY\_TIME);

 // Yellow (Red and Green)

 digitalWrite(RED\_PIN, LOW);

 digitalWrite(GREEN\_PIN, LOW);

 digitalWrite(BLUE\_PIN, HIGH);

 delay(DISPLAY\_TIME);

 // Cyan (Green and Blue)

 digitalWrite(RED\_PIN, HIGH);

 digitalWrite(GREEN\_PIN, LOW);

 digitalWrite(BLUE\_PIN, LOW);

 delay(DISPLAY\_TIME);

 // Purple (Red and Blue)

 digitalWrite(RED\_PIN, LOW);

 digitalWrite(GREEN\_PIN, HIGH);

 digitalWrite(BLUE\_PIN, LOW);

 delay(DISPLAY\_TIME);

 // White (turn all the LEDs on)

 digitalWrite(RED\_PIN, LOW);

 digitalWrite(GREEN\_PIN, LOW);

 digitalWrite(BLUE\_PIN, LOW);

 delay(DISPLAY\_TIME);

}