

```
// Define Pins

#define RED 11

#define GREEN 10

#define BLUE 9

#define delayTime 50 // fading time between colors

void setup()
{
  pinMode(RED, OUTPUT);
  pinMode(GREEN, OUTPUT);
  pinMode(BLUE, OUTPUT);
  digitalWrite(RED, HIGH);
  digitalWrite(GREEN, HIGH);
  digitalWrite(BLUE, HIGH);
}

// define variables
int redValue;
int greenValue;
int blueValue;

// main loop
```

```
void loop()
{
  redValue = 255; // choose a value between 1 and 255 to change the color.

  greenValue = 0;
  blueValue = 0;

  analogWrite(RED, 0);
  delay(5000);

  for(int i = 0; i < 255; i += 1) // fades out red bring green full when i=255
  {
    redValue -= 1;
    greenValue += 1;
    analogWrite(RED, 255 - redValue);
    analogWrite(GREEN, 255 - greenValue);
    delay(delayTime);
  }

  redValue = 0;
  greenValue = 255;
  blueValue = 0;

  for(int i = 0; i < 255; i += 1) // fades out green bring blue full when i=255
  {
    greenValue -= 1;
```

```
blueValue += 1;
analogWrite(GREEN, 255 - greenValue);
analogWrite(BLUE, 255 - blueValue);
delay(delayTime);
}
```

```
redValue = 0;
greenValue = 0;
blueValue = 255;
```

```
for(int i = 0; i < 255; i += 1) // fades out blue bring red full when i=255
{
redValue += 1;
blueValue -= 1;
analogWrite(REDA, 255 - redValue);
analogWrite(BLUE, 255 - blueValue);
delay(delayTime);
}
}
```