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// Sample program 5/22/2014
// Sets all initial variables
int led = 13; // Pin 13 has an LED connected on most Arduino boards. This command names the
pin LED.
int brightness = 5; // how bright the LED is
int fadeAmount = 150; // how many points to fade the LED by

// Setup
void setup() { // the setup routine runs once when you press reset:
  pinMode(led, OUTPUT); // initialize petal 13 (previously named led) as an output.
  pinMode(2, OUTPUT); // initialize petal 2 as an output.
  pinMode(4, OUTPUT); // initialize petal 4 as an output.
  pinMode(9, OUTPUT); // initialize petal 9 as an output.
}

void loop() { // the loop routine runs over and over again forever:
// Fade program for petal 9
  analogWrite(9, brightness); // set the brightness of pin 9:
  brightness = brightness + fadeAmount; // increase the brightness for next time through the
loop:
  if (brightness == 0 || brightness == 305)
  {
    fadeAmount = -fadeAmount ; // reverse the direction of the fading at the ends of the fade:
  }
  delay(1000); // wait a second on this brightness
  digitalWrite(9, LOW); //turn petal 9 off by making the voltage LOW

// program for LED (petal 13) The LED lighting up indicates when the pattern is starting over.
  digitalWrite(led, HIGH); //turn led on (High is the voltage level)
  delay(500); //wait for half a second
  digitalWrite(led, LOW); //turn led off by making the voltage LOW

// Blink program for petal 2
  digitalWrite(2, HIGH); // turn petal 2 on (HIGH is the voltage level)
  delay(500); // wait for half a second
  digitalWrite(2, LOW); // turn petal 2 off by making the voltage LOW
  delay(1000); // wait for a second
  digitalWrite(2, HIGH); // turn petal 2 on (HIGH is the voltage level)
  delay(2000); // wait for 2 seconds
  digitalWrite(2, LOW); // turn petal 2 off by making the voltage LOW
  delay(500); // wait for half a second

// Blink program for petal 4
  digitalWrite(4, HIGH); // turn petal 4 on (HIGH is the voltage level)

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delay(500);          // wait for half a second
digitalWrite(4, LOW); // turn petal 4 off by making the voltage LOW
delay(500);          // wait for half a second
digitalWrite(4, HIGH); // turn petal 4 on (HIGH is the voltage level)
delay(500);          // wait for half a second
digitalWrite(4, LOW); // turn petal 4 off by making the voltage LOW
delay(500);          // wait for half a second
digitalWrite(4, HIGH); // turn petal 4 on (HIGH is the voltage level)
delay(500);          // wait for half a second
digitalWrite(4, LOW); // turn petal 4 off by making the voltage LOW
delay(500);          // wait for half a second
}
```