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/*

Experiment No. :    04

Statement      :    Fade and brighten 5 LEDs alternatively.

Date of Exp.   :    xx/xx/xxxx

Author         :    Harsh Devendra Mishra (A-28)



*/
int ledPin = 2;
int ledPin2 = 3;
int ledPin3 = 4;
int ledPin4 = 5;
int ledPin5 = 6;
void setup() {
  pinMode(ledPin, OUTPUT);
  pinMode(ledPin2, OUTPUT);
  pinMode(ledPin3, OUTPUT);
  pinMode(ledPin4, OUTPUT);
  pinMode(ledPin5, OUTPUT);
}

void loop() {
  // fade in from min to max in increments of 5 points:
  for (int fadeValue = 0 ; fadeValue <= 255; fadeValue =
fadeValue+5)
{
    // sets the value (range from 0 to 255):
    analogWrite(ledPin, fadeValue);
    // wait for 30 milliseconds to see the dimming effect
    delay(30);
  }

  // fade out from max to min in increments of 5 points:
  for (int fadeValue = 255 ; fadeValue >= 0; fadeValue = fadeValue-
5)
{
    // sets the value (range from 0 to 255):
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    analogWrite(ledPin, fadeValue);
    // wait for 30 milliseconds to see the dimming effect
    delay(30);
  }

  // fade in from min to max in increments of 5 points:
  for (int  fadeValue = 0 ;  fadeValue <=  255; fadeValue =
fadeValue+5)
{
    // sets the value (range from 0 to 255):
    analogWrite(ledPin2, fadeValue);
    // wait for 30 milliseconds to see the dimming effect
    delay(30);
  }

  // fade out from max to min in increments of 5 points:
  for (int fadeValue = 255 ; fadeValue >= 0; fadeValue = fadeValue-
5)
 {
    // sets the value (range from 0 to 255):
    analogWrite(ledPin2, fadeValue);
    // wait for 30 milliseconds to see the dimming effect
    delay(30);
  }
// fade in from min to max in increments of 5 points:
  for (int  fadeValue = 0 ;  fadeValue <=  255; fadeValue =
fadeValue+5)
{
    // sets the value (range from 0 to 255):
    analogWrite(ledPin3, fadeValue);
    // wait for 30 milliseconds to see the dimming effect
    delay(30);
  }
for (int fadeValue = 255 ; fadeValue >= 0; fadeValue = fadeValue-
5)


 {
    // sets the value (range from 0 to 255):
    analogWrite(ledPin3, fadeValue);
    // wait for 30 milliseconds to see the dimming effect
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    delay(30);}


for (int fadeValue = 0 ; fadeValue <= 255; fadeValue = fadeValue+5)
{
    // sets the value (range from 0 to 255):
    analogWrite(ledPin4, fadeValue);
    // wait for 30 milliseconds to see the dimming effect
    delay(30);
  }
for (int fadeValue = 255 ; fadeValue >= 0; fadeValue = fadeValue-
5)
{
    // sets the value (range from 0 to 255):
    analogWrite(ledPin4, fadeValue);
    // wait for 30 milliseconds to see the dimming effect
    delay(30);}


  for  (int  fadeValue  =  0  ;  fadeValue  <=  255;  fadeValue  =
fadeValue+5)
{
    // sets the value (range from 0 to 255):
    analogWrite(ledPin5, fadeValue);
    // wait for 30 milliseconds to see the dimming effect
    delay(30);
  }
for (int fadeValue = 255 ; fadeValue >= 0; fadeValue = fadeValue-
5)
{
    // sets the value (range from 0 to 255):
    analogWrite(ledPin5, fadeValue);
    // wait for 30 milliseconds to see the dimming effect
    delay(30);
}
}
```