# LED Digital

void loop**()**

**{**

digitalWrite**(**13**,** HIGH**);**

delay**(**1000**);**

digitalWrite**(**13**,** LOW**);**

delay**(**1000**);**

**}**

# LED Analog

void loop**()**

**{**

**for** **(**x **=** 0**;** x **<** 256**;** x**++)**

**{**

analogWrite**(**13 **,** x**);**

delay**(**10**);**

**}**

**}**

# LED Analog Both Ways

void loop**()**

**{**

**for** **(**x **=** 0**;** x **<** 256**;** x**++)**

**{**

analogWrite**(**13 **,** x**);**

delay**(**10**);**

**}**

delay**(**500**);**

**for** **(**x **=** 0**;** x **<** 256**;** x**++)**

**{**

analogWrite**(**13 **,** 255 **-** x**);**

delay**(**10**);**

**}**

**}**

# LED RGB Simple

void setup**()**

**{**

analogWrite**(**9 **,** 0**);**

analogWrite**(**10 **,** 150**);**

analogWrite**(**11 **,** 255**);**

**}**

# LED RGB Fade

void loop**()**

**{**

**for** **(**x **=** 0**;** x **<** 256**;** x**++)**

**{**

analogWrite**(**9 **,** x**);**

analogWrite**(**10 **,** 255 **-** x**);**

delay**(**10**);**

**}**

**}**

# LED RGB Rainbow

void loop**()**

**{**

RedToGreen**();**

GreenToBlue**();**

BlueToRed**();**

**}**

void BlueToRed**()**

**{**

**int** x;

**for** **(**x **=** 0**;** x **<** 256**;** x**++)**

**{**

analogWrite**(**9 **,** 255 **-** x**);**

analogWrite**(**10 **,** 255**);**

analogWrite**(**11 **,** x**);**

delay**(**10**);**

**}**

**}**

void GreenToBlue**()**

**{**

**for** **(**x **=** 0**;** x **<** 256**;** x**++)**

**{**

analogWrite**(**9 **,** 255**);**

analogWrite**(**10 **,** x**);**

analogWrite**(**11 **,** 255 **-** x**);**

delay**(**10**);**

**}**

**}**

void RedToGreen**()**

**{**

**for** **(**x **=** 0**;** x **<** 256**;** x**++)**

**{**

analogWrite**(**9 **,** x**);**

analogWrite**(**10 **,** 255 **-** x**);**

analogWrite**(**11 **,** 255**);**

delay**(**10**);**

**}**

**}**

# Serial Echo

void loop**()**

**{**

**if** **(**Serial**.**available**())**

**{**

Serial**.**write**(**Serial**.**read**());**

**}**

**}**

# Serial Print

void setup**()**

**{**

Serial**.**begin**(**9600**);**

Serial**.**print**(**"Hi! :)"**);**

Serial**.**println**();**

**}**