

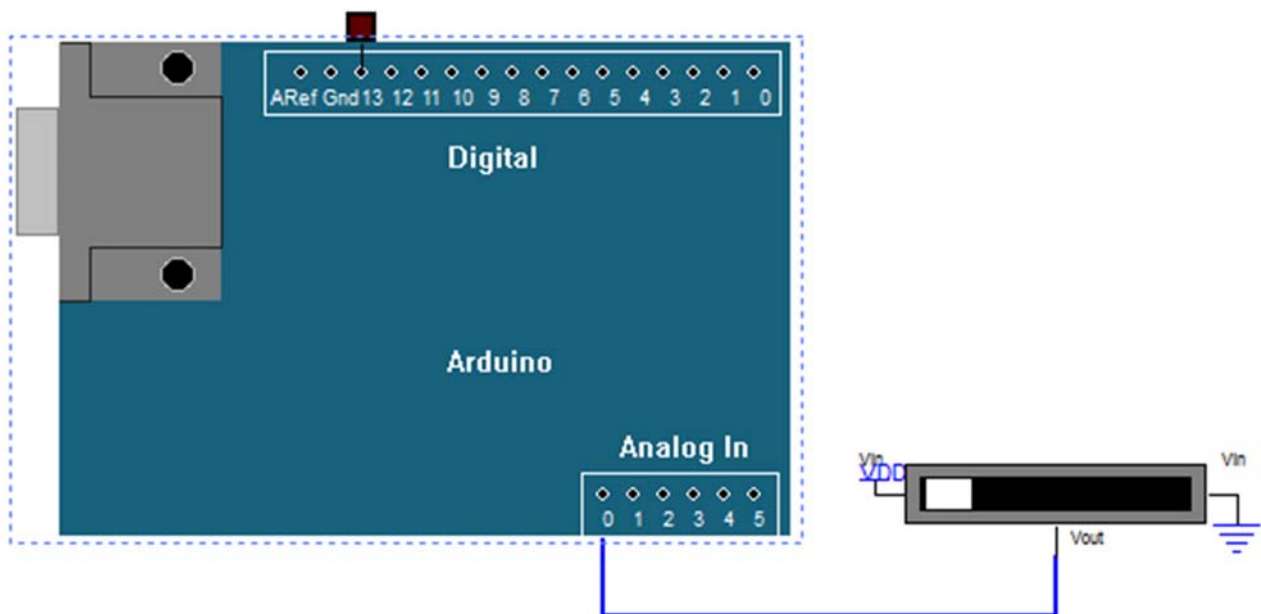


Lecture (04)

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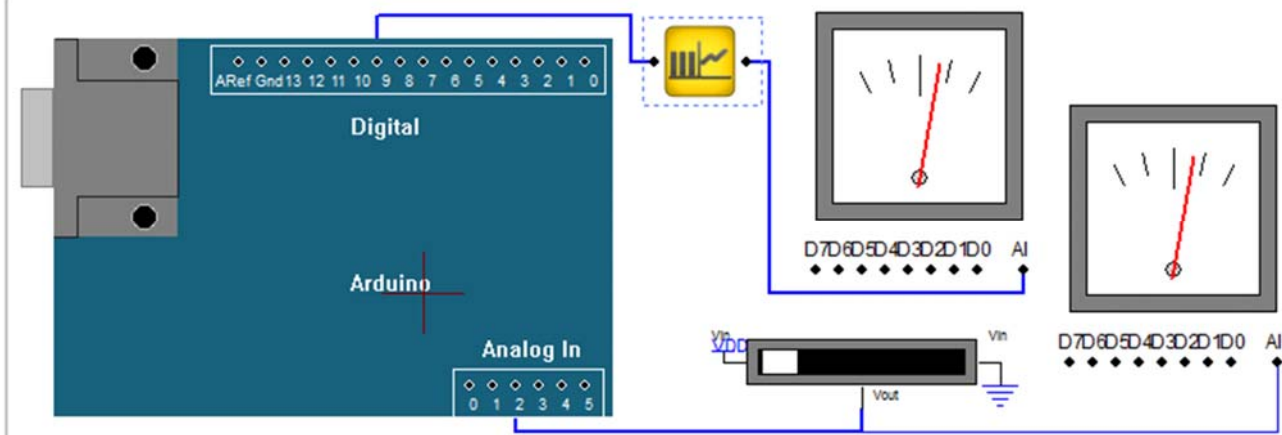
Analog Input 1 (pot controlled delay)



```
Analog_Input_1 | Arduino 1.6.8
File Edit Sketch Tools Help
Analog_Input_1
int sensorPin = 0;
int ledPin = 13;
int sensorValue = 0;
void setup() {
    pinMode(ledPin, OUTPUT);
}
void loop() {
    sensorValue = analogRead(sensorPin);
    digitalWrite(ledPin, HIGH);
    delay(sensorValue);
    digitalWrite(ledPin, LOW);
    delay(sensorValue);
}
```

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Analog Input Analog Output



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```
File Edit Sketch Tools Help
Analog_input_output_1 $

const int sensorPin = 2;
const int ledPin = 9;

int sensorValue = 0;

void setup() {
  pinMode(ledPin, OUTPUT);
}
void loop() {
  sensorValue = analogRead(sensorPin);
  |
  analogWrite(ledPin, sensorValue);
}
```

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```
File Edit Sketch Tools Help
Analog_input_output_1

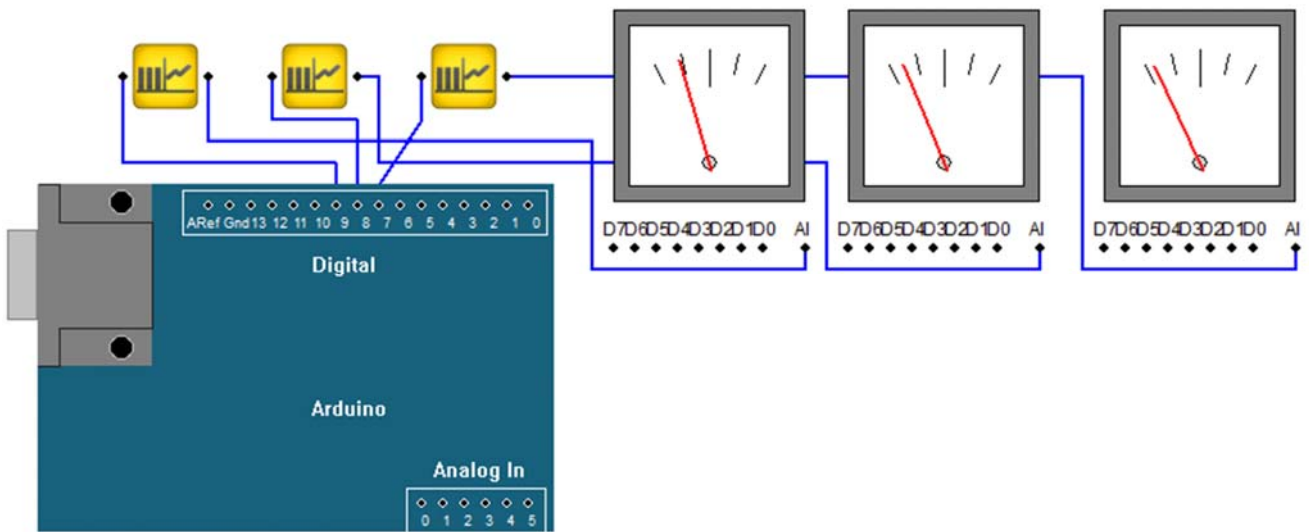
const int sensorPin = 2;
const int ledPin = 9;

int sensorValue = 0;

void setup() {
  pinMode(ledPin, OUTPUT);
}
void loop() {
  sensorValue = analogRead(sensorPin);
  sensorValue=sensorValue*256/1024;
  analogWrite(ledPin, sensorValue);
}
```

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Analog output 1



v

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```
Analog_output_1 | Arduino 1.6.8
File Edit Sketch Tools Help
Analog_output_1
int ledPin = 9;
int ledPin2 = 8;
int ledPin3 = 7;

void setup() {
}

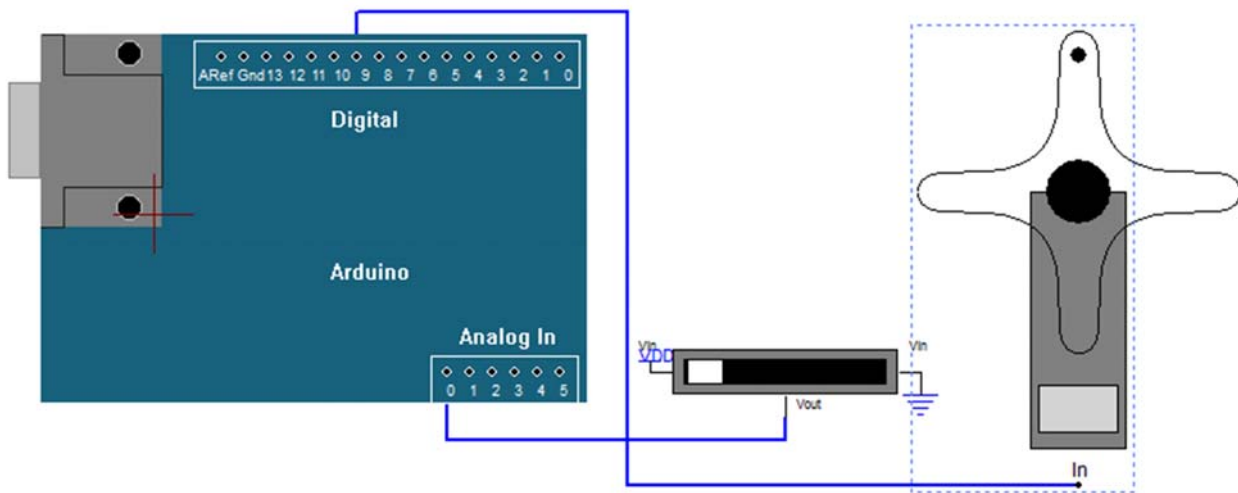
void loop() {

  for (int fadeValue = 0 ; fadeValue <= 255; fadeValue += 5)
  {
    analogWrite(ledPin, fadeValue);
    analogWrite(ledPin2, fadeValue / 2);
    analogWrite(ledPin3, fadeValue / 3);
    delay(50);
  }

  for (int fadeValue = 255 ; fadeValue >= 0; fadeValue -= 5)
  {
    analogWrite(ledPin, fadeValue);
    analogWrite(ledPin2, fadeValue / 2);
    analogWrite(ledPin3, fadeValue / 3);
    delay(50);
  }
}
```

App. CS II

ServoMotor



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```
Servo1 | Arduino 1.5.2
File Edit Sketch Tools Help
Servo1
#include <Servo.h>
Servo myservo;
int potpin = 0;
int val;
void setup()
{
  myservo.attach(9);
}
void loop()
{
  val = analogRead(potpin);
  val = map(val, 0, 1023, 0, 179);
  myservo.write(val);
  delay(15);
}
```

Thanks,
See you next Week, isA