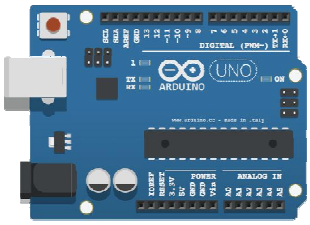
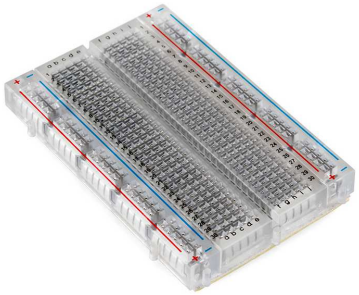
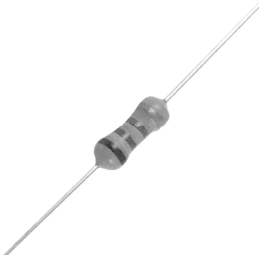
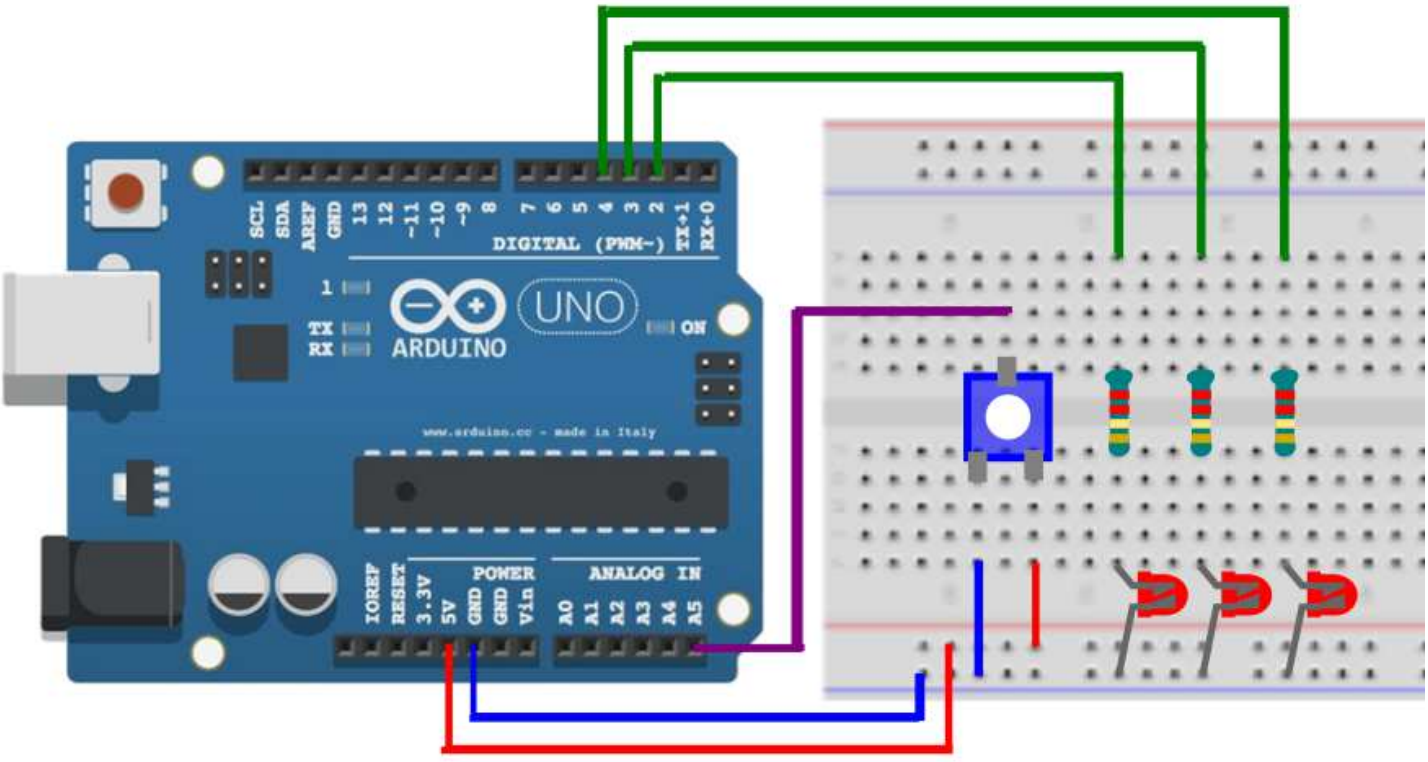
Hands-On Demo - LED



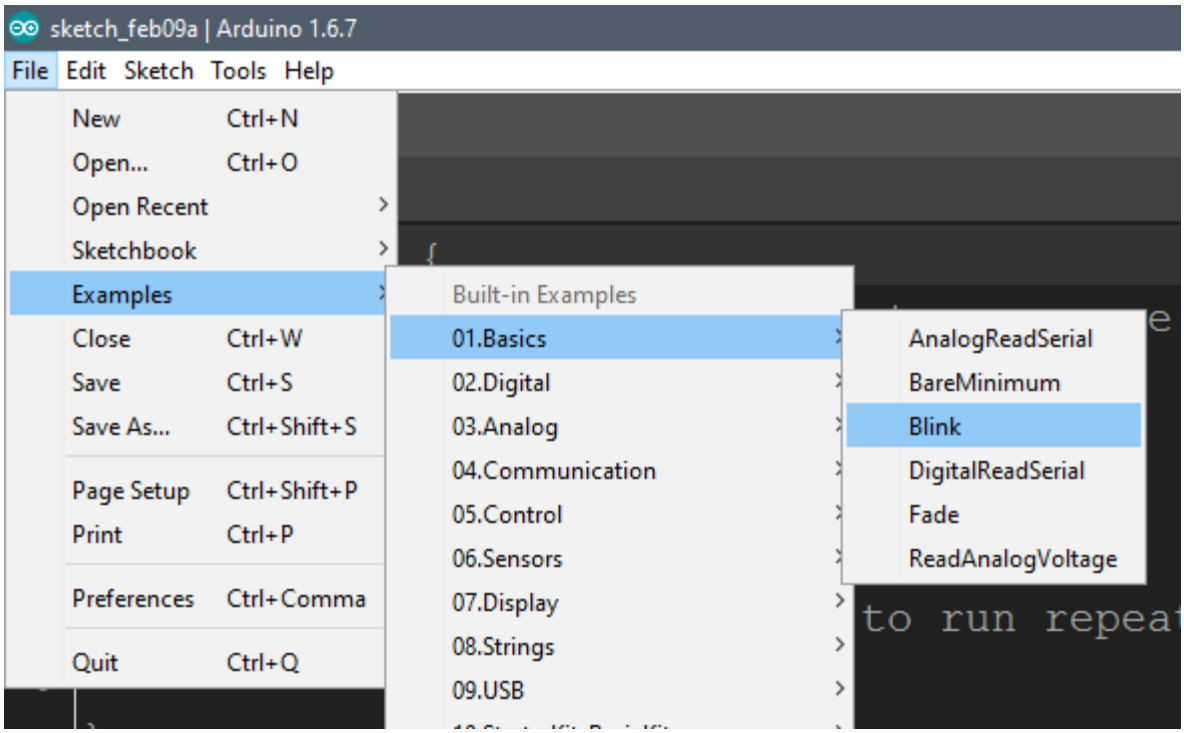




Step 1: Connect Components



Step 2: Open Arduino IDE

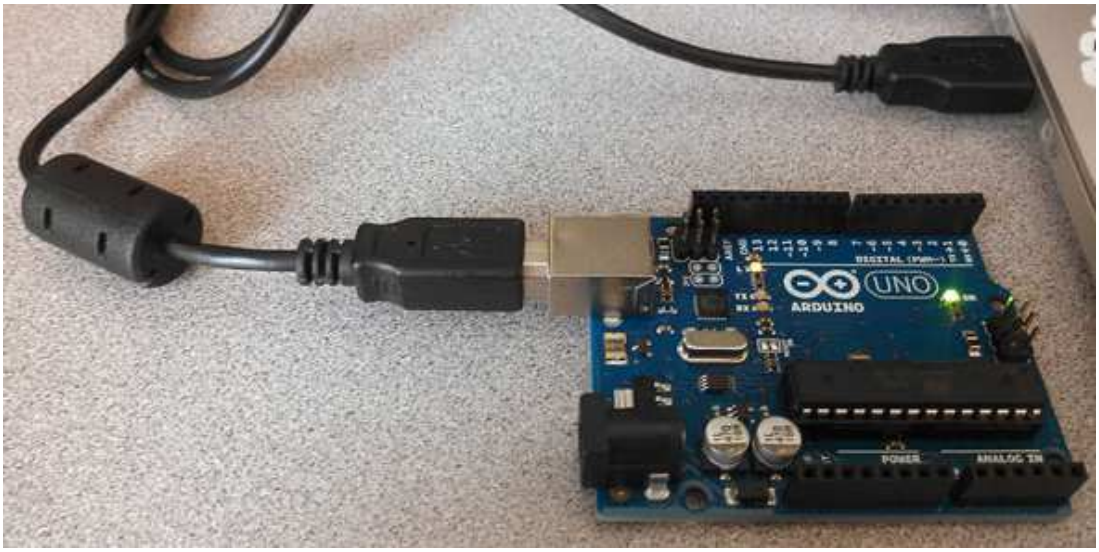


Step 3: Set Output Pin = 2

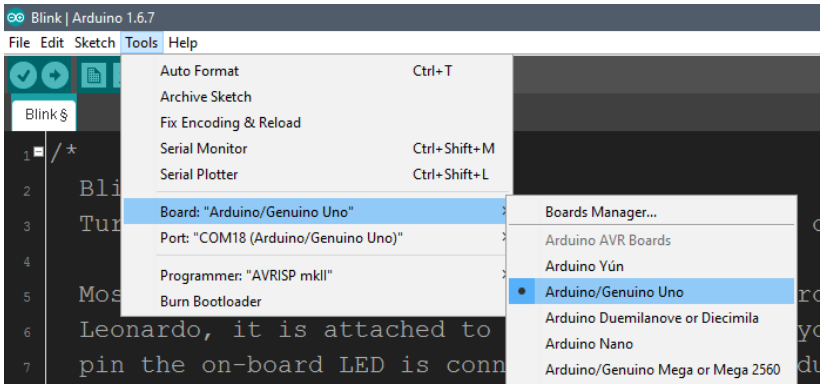
```
15
16
17 // the setup function runs once when you press reset or power the board
18 void setup() {
19   // initialize digital pin 13 as an output.
20   pinMode(2, OUTPUT);
21 }
```

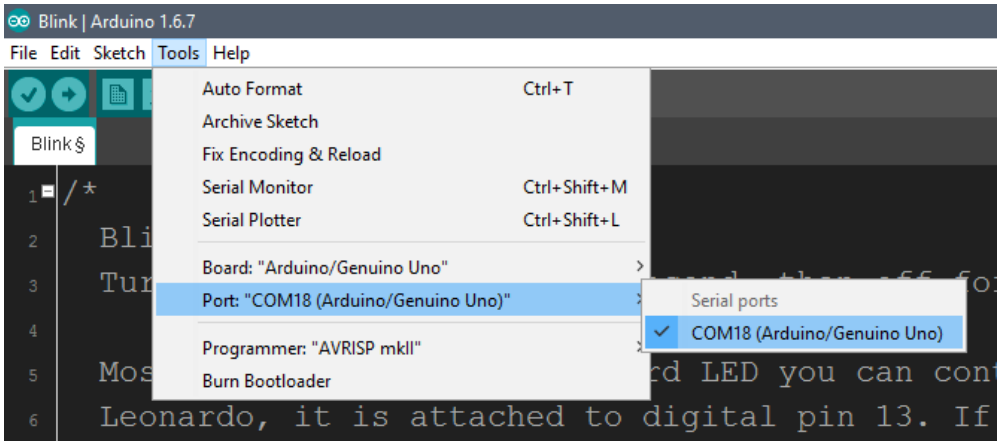
```
23 // the loop function runs over and over again forever
24 void loop() {
25   digitalWrite(2, HIGH);   // turn the LED on (HIGH is the voltage level)
26   delay(1000);              // wait for a second
27   digitalWrite(2, LOW);    // turn the LED off by making the voltage LOW
28   delay(1000);              // wait for a second
29 }
```

Step 4: Connect Arduino to PC

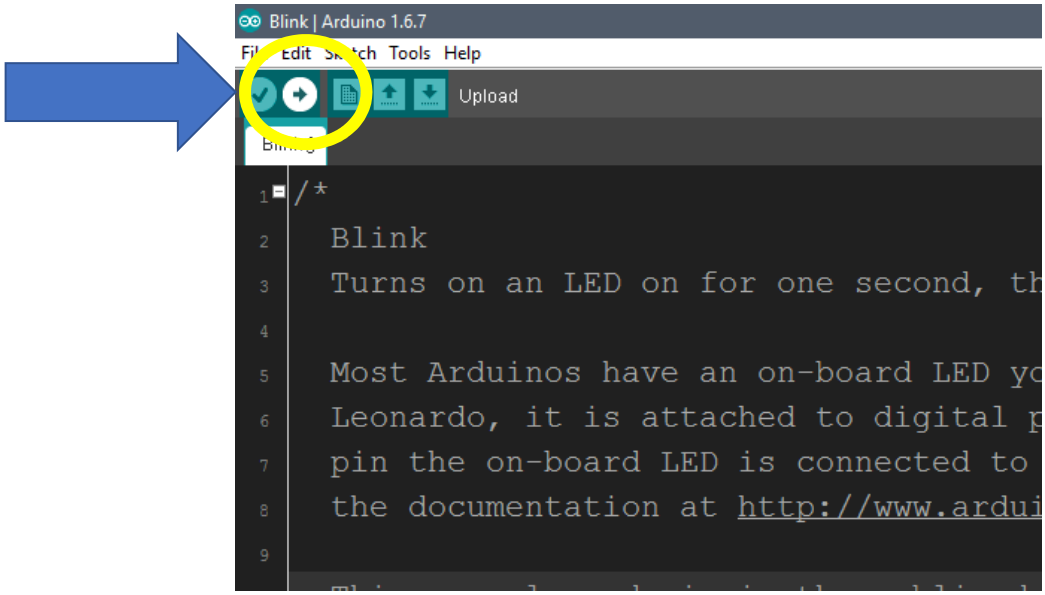


Step 5: Select Board & Port

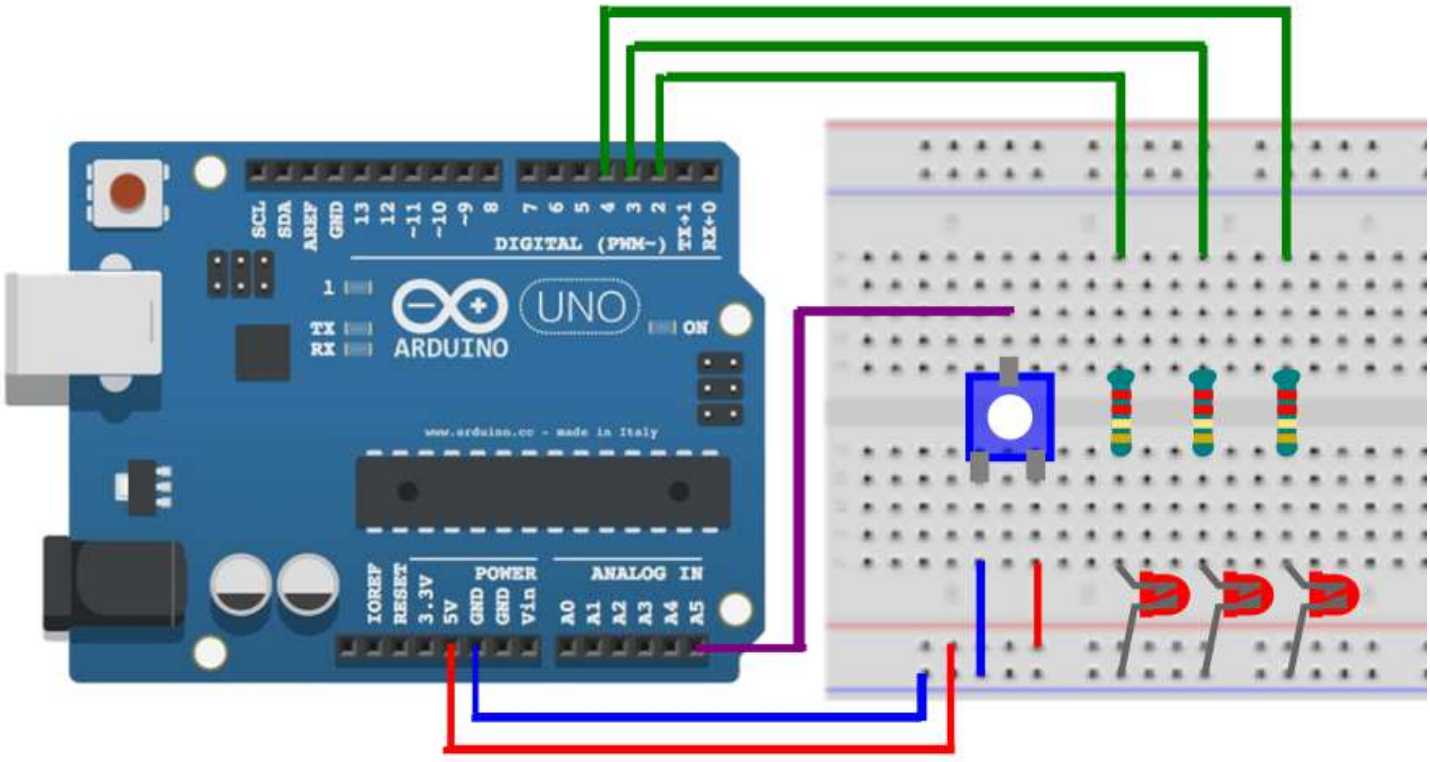




Step 6: Upload



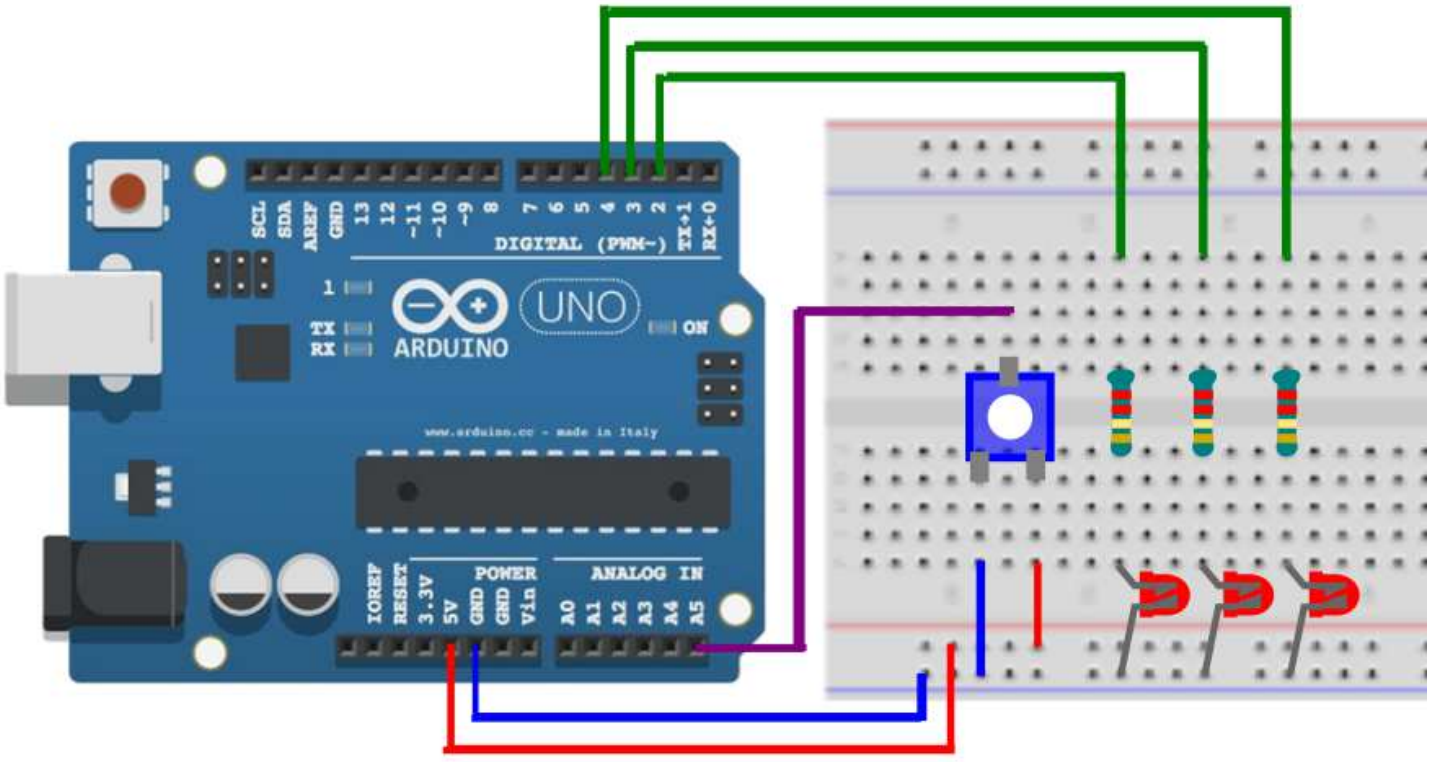
Hands-On Demo – Analog Input



Hands-On Demo– Analog Input

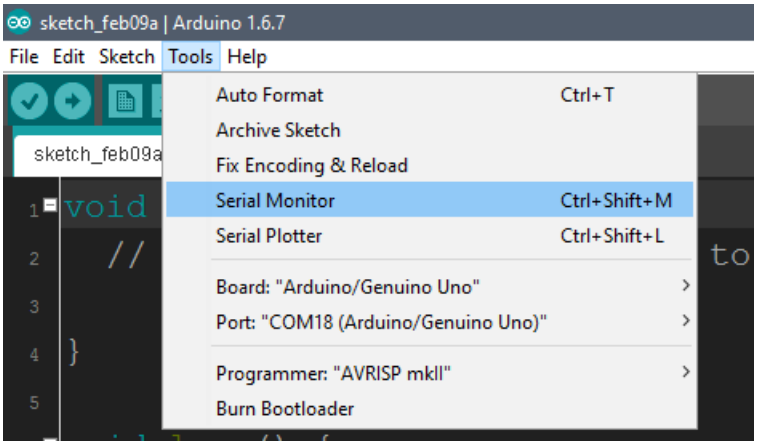
- Create a new Sketch
- Go to: github.com/wbock/Lecture4
- Copy-paste from “**AnalogDemo1.ino”**
- Upload to Arduino

Hands-On Demo – Communication



Hands-On Demo – Communication

- Create a new Arduino Sketch
- Go to: github.com/wbock/Lecture4
- Copy-paste from "**AnalogDemo2.ino**"
- Upload to Arduino
- Open the Serial Monitor
- Are the values arriving?



Hands-On Demo – Communication

- Create a new Processing Sketch
- Copy-paste from "**CommunicationDemo.pde**"
- Run sketch
- Start turning the **pot**entiometer
- Is anything changing?