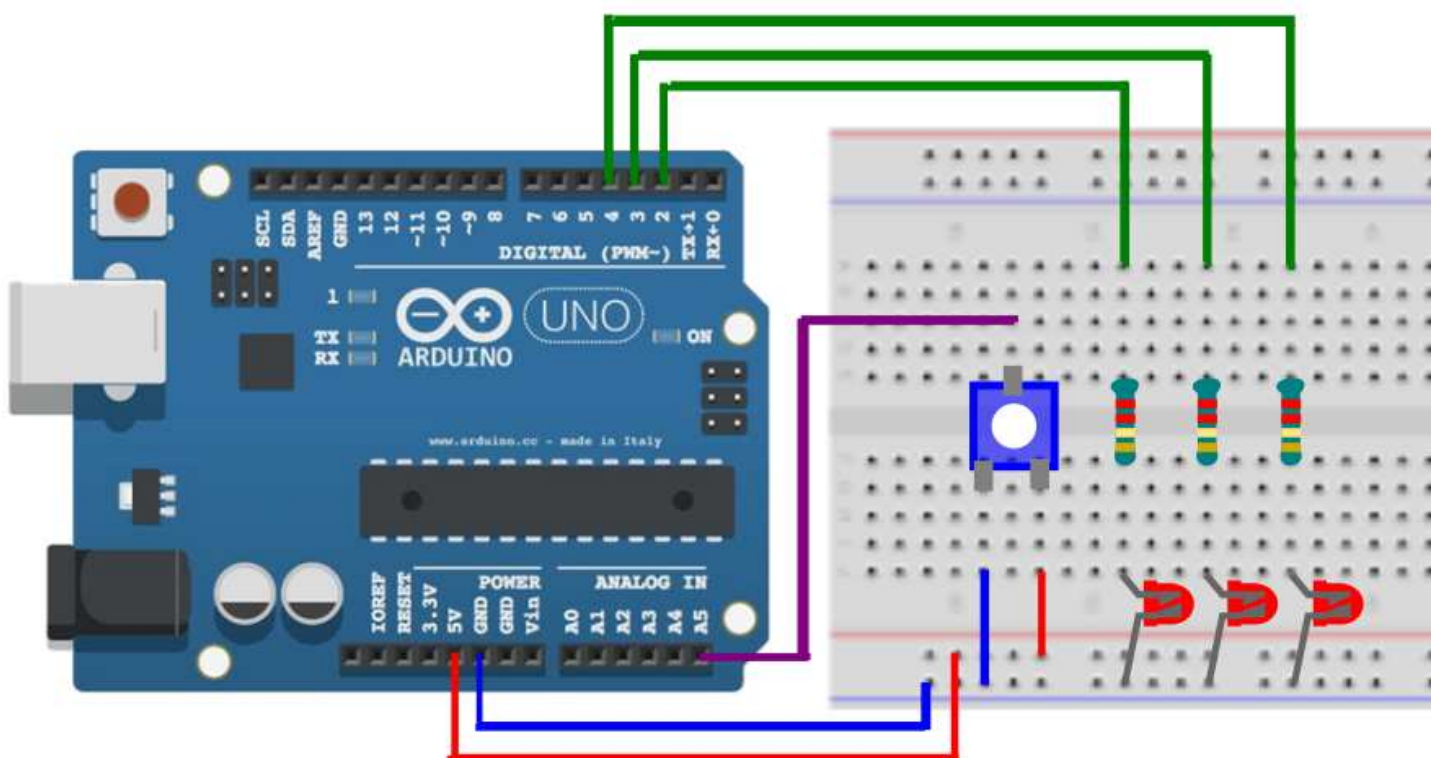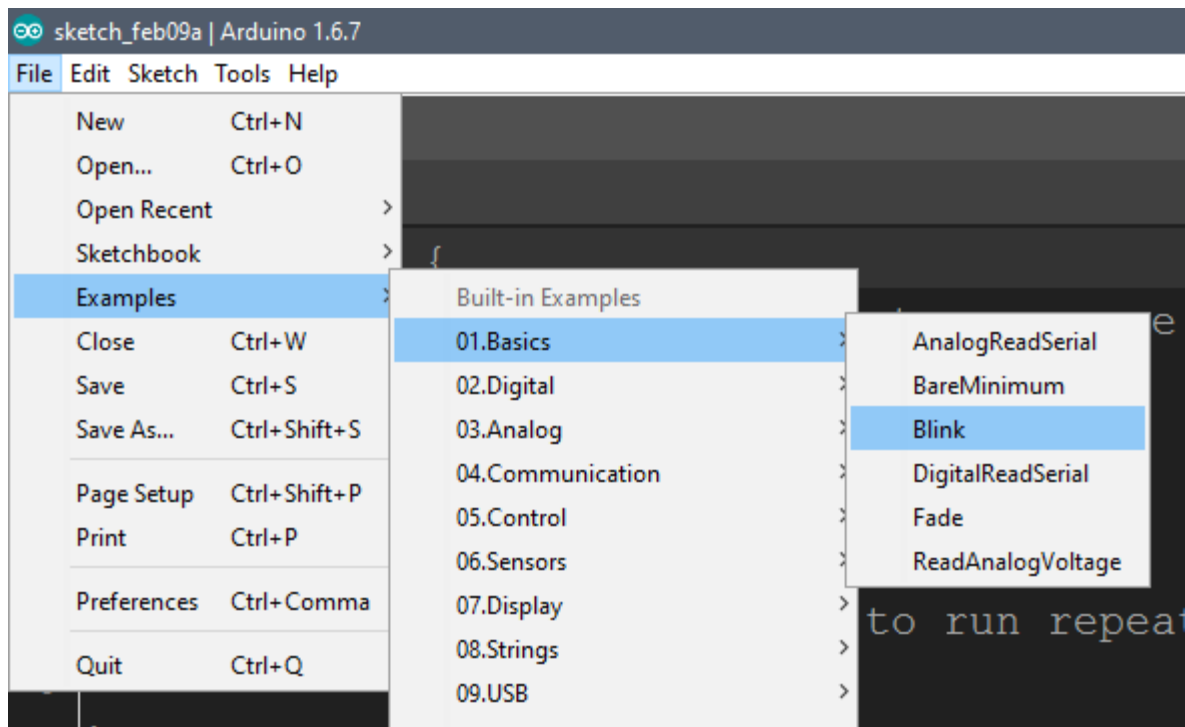# Practical Example - LED

Step 1: Connect Components

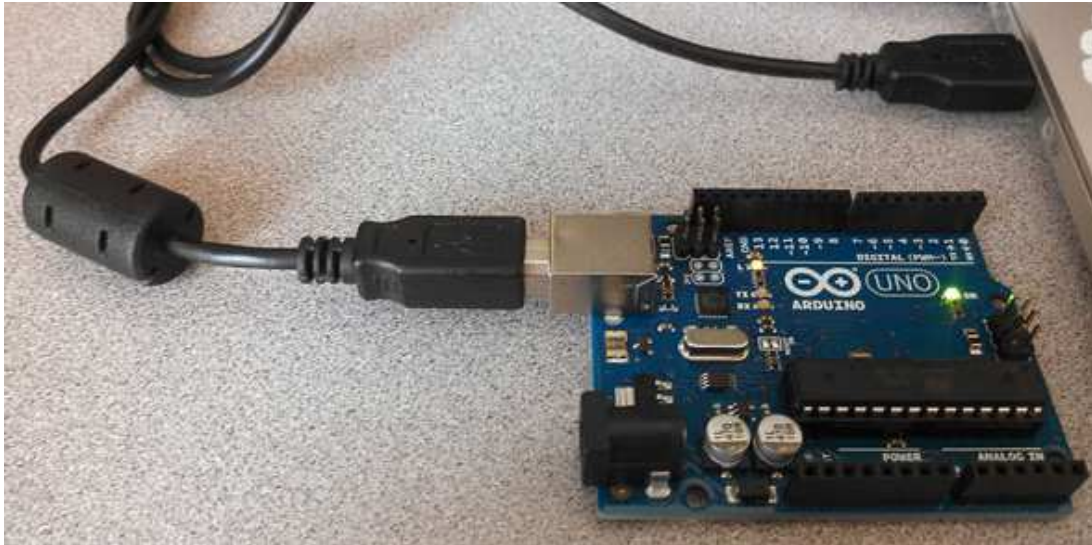# Step 2: Open Arduino IDE

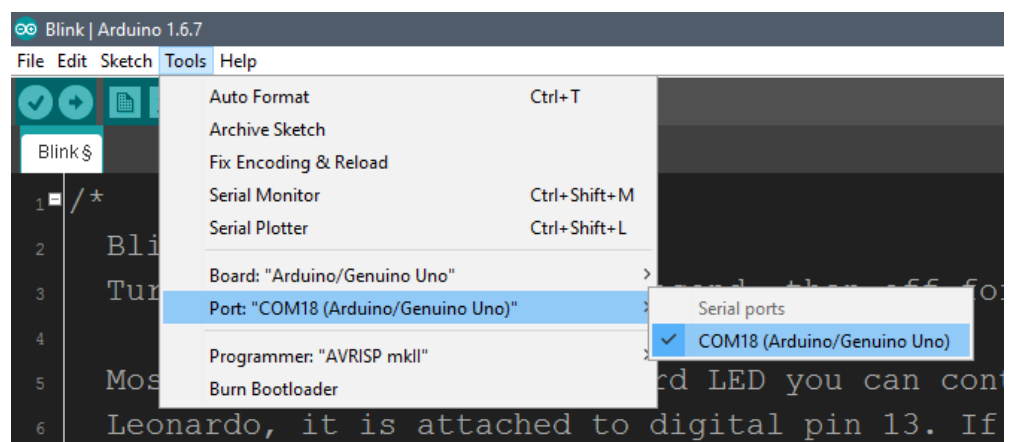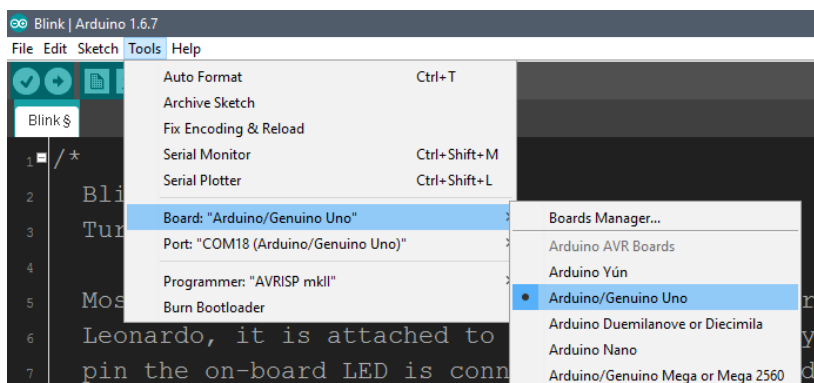# Step 3: Set Output Pin = 2

```
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  }
```
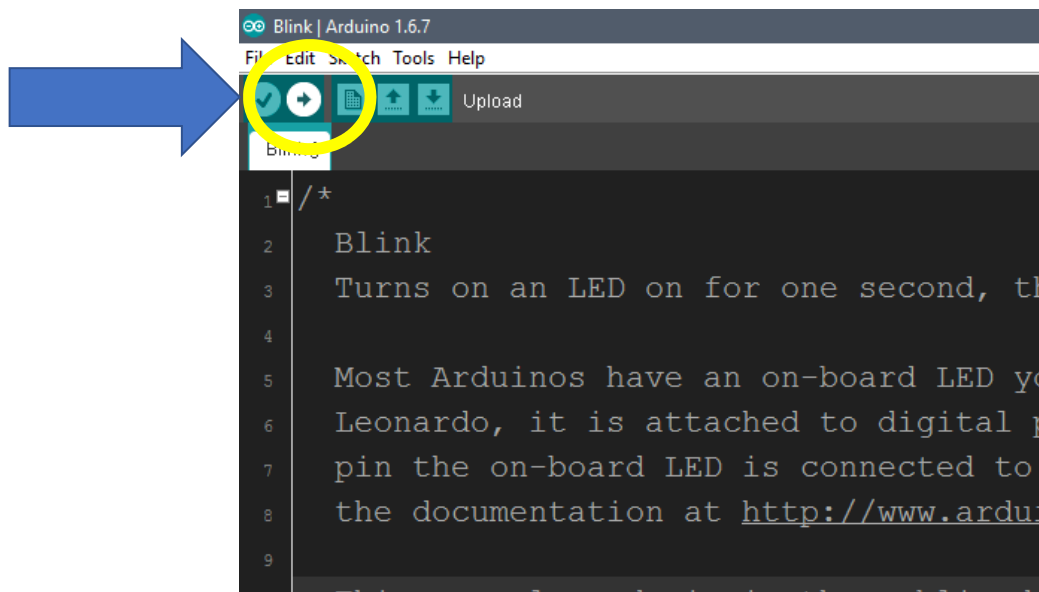
Step 4: Connect Arduino to PC

Step 5: Select Board & Port
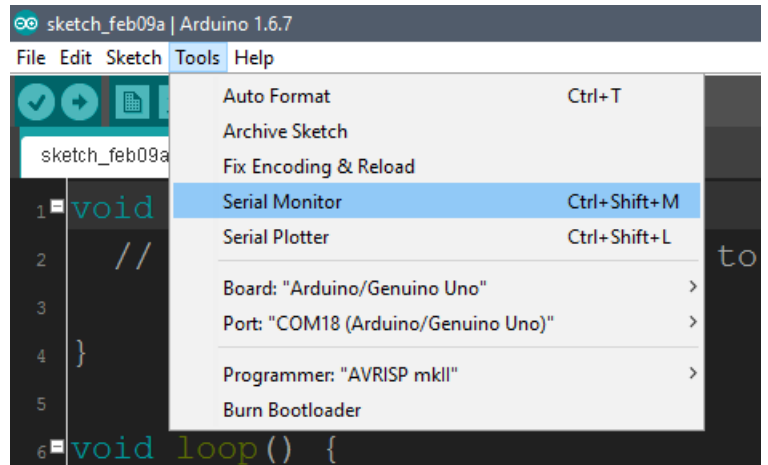
Step 6: Upload

Practical Example – Analog Input

- Create a new Sketch

- Go to: github.com/wbock/Lecture4

- Copy-paste from "**AnalogDemo1.ino**"

- Upload to Arduino

Practical Example – 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?

Practical Example – Communication

- Create a new Processing Sketch

- Copy-paste from "**CommunicationDemo.pde**"

- Run sketch

- Start turning the **pot**entiometer

- Is anything changing?