

## Serial Port

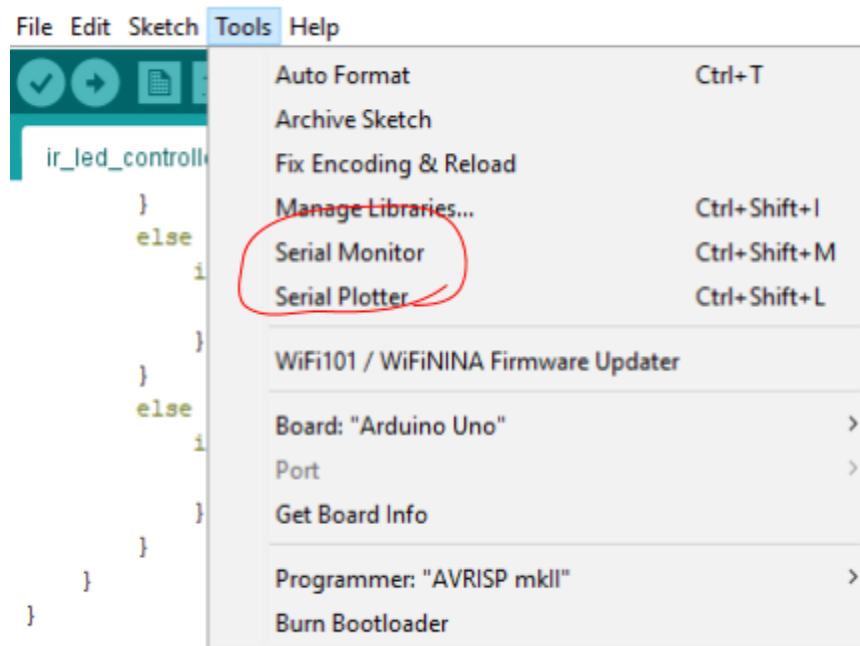
A serial system is a type of hardware that uses signals sent one after another to communicate, instead of sending lots of signals at once. One example is the cable that connects your computer to the internet. There isn't one wire for each pixel in the cat picture you just downloaded, instead the cable sends one bit at a time until it's sent it all. The "S" in USB stands for serial.

None of this is important to what we're doing. All we need to know is that the serial system on the arduino allows us to send signals through the USB to the computer and read signals that come from the computer.

To use serial, we must first tell the arduino that we want to make a serial connection. The way to this is by putting

```
Serial.begin(9600);
```

in the setup() section of our code. The 9600 is just a number that says how many small signals we plan to send in a second. 9600 is the standard, so we'll use that.



Following the picture above, open the serial monitor. Make sure that the monitor box for "baud rate" has the same number as your `Serial.begin()`. Now we're ready to use it. Right now, we don't really know how to read signals from the computer, but we can use `Serial.print()` to send signals to our monitor. Just like in c++, we can print `Serial.print("test\n")` to check that we have reached a section of code. If you want to go to the next line you have to include the `"\n"`. Try goofing around with the `Serial.print`, see what you can write!