

Lab 1

CS3514

02/10/17

1. Connect the Arduino and upload the blink sketch.

Choose correct board and com port from tools menu.

We are using the Duemilanove ATmega328

2. change
 `int led = 13;`
 to
 `#define LED 13`

Use uppercase letters for all identifiers in `#define` statements

3. change blink rate

4. Connect pin 13 to a resistor & LED on breadboard.

Why do we need the resistor?

5. Change H/W & S/W to work with pin 8 instead of pin 13

6. Connect 2 more LEDs and Current Limiting

resistors to pins 7 & 6. Use different colours:-

Red, yellow, green for example.

7. Write code to turn on each LED in turn to simulate a traffic light.

8. Write a C-function that accepts a LED and a duration and turns that LED on for that duration.

9. Add more LEDs (and resistors) and write code to simulate the lights in the

"Knight-rider car"