**Level 0: Sample Program**

1. Implement and run the sample program defined in Appendix A..
2. Observe the number times the LED blinked.

4

1. Explain why the LED only blinked 4 times.

Because blink was at 4

**Level 1: Variable Scope**

1. Comment out (remove) line #24 with the code “int times = value;”
2. Observe the number times the LED blinked and explain how this is different from before.

Added an extra blink

1. Explain how line #24 with the code “int times = value;” changes the program.  
   the line from aboive will now affect the blink since it now closes and opens.
2. There are two definitions for “int times”. Once on line #2 and once on line #24.
   1. Explain where each definition applies in the code

Line 2 is what the value that the int is.For line 24 it means that you are adding 1 to the blink

* 1. Explain if there is any of overlap

No because it is enclosed and none of the prequiest for it to blink did not happen.

**Level 2: Adding Colored LEDs**

1. Extend your proto-board to add two colored LEDs.
2. Modify your procedure definition on line #23 to look like the following:  
   “int blink(int value, int led) {“
3. Modify the code in your procedure to light up the LED indicated in the procedure parameter.
4. Modify your main loop to correctly use your new procedure definition.

**Level 3: Changing LEDs**

1. Research the Arduino “random()” built-in function.
2. Modify your main loop to randomly change LED colors.
3. Modify your main loop to randomly change blink times.