

CSC 130 RPi Activity: LED the Way		
#	ITEM	POINTS
Calculation 1		
1	Formula stated and units identified	2
2	Correct source voltage and LED forward voltage	2
3	Proper unit conversion	1
Calculation 2		
4	Formula stated and units identified	2
5	Correct source voltage and LED forward voltage	2
6	Proper unit conversion	1
Calculation 2		
7	Formula stated and units identified	2
8	Correct source voltage and LED forward voltage	2
9	Proper unit conversion	1
Truth table 1		
10	A and B values are in order	1
11	Rows are correct	2
Truth table 2		
12	A and B values are in order	1
13	Rows are correct	2
Circuit		
14	Includes the LED, resistor, and switch	3
15	Components are labeled	1
16	Components are properly placed	1
17	LED is driven from an output pin, to a resistor, to ground	2
18	Switch is properly connected to either +3.3V, +5V, or GND	2
19	Circuit is properly laid out	2
Program		
20	Source code includes an appropriate header	1
21	Source code is appropriately commented throughout	1
22	Coding style is good	2
23	Variable names are meaningful	1
24	Switch is properly sensed (input pin setup matches the circuit layout)	2
25	LED is properly driven (HIGH=on, LOW=off)	2
26	LED blinks appropriately based on switch status	3
27	Program runs forever	1
	TOTAL	45