

Name and Student ID: \_\_\_\_\_ Lab Section: \_\_\_

Date: \_\_\_\_\_

### PRELAB:

**Q1.** Consider the Verilog code in section 3.0. Briefly explain how the **always @** structure works.

**Q2.** Write the Verilog code for **lab4step1**. Use the example code given in Section 3.0 and make the necessary changes.

**Q3.** Read Section 4.0 and fill in the Truth Table for *lab4step2*.

Inputs				Outputs		
M	T	H	P	E	F	AC
0	0	0	0			
0	0	0	1			
0	0	1	0			
0	0	1	1			
0	1	0	0			
0	1	0	1			
0	1	1	0			
0	1	1	1			
1	0	0	0			
1	0	0	1			
1	0	1	0			
1	0	1	1			
1	1	0	0			
1	1	0	1			
1	1	1	0			
1	1	1	1			

TA Initials: \_\_\_\_\_

**LAB:**

**3.0** Use the hardware results to fill in the truth table for *lab4step1*.

Farmer	Cabbage	Goat	Wolf	Alarm
0	0	0	0	
0	0	0	1	
0	0	1	0	
0	0	1	1	
0	1	0	0	
0	1	0	1	
0	1	1	0	
0	1	1	1	
1	0	0	0	
1	0	0	1	
1	0	1	0	
1	0	1	1	
1	1	0	0	
1	1	0	1	
1	1	1	0	
1	1	1	1	

Hardware results demonstrate correct code. TA Initials: \_\_\_\_\_

**4.0** Demonstrate hardware results for correct code. TA Initials: \_\_\_\_\_