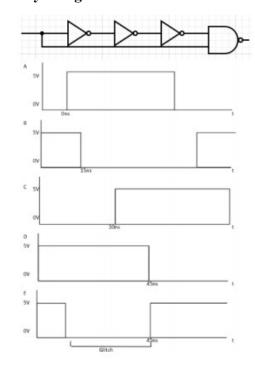**Pre-lab Report 3**   Alan Biju Palayil

ECE 218- L01   Lab Date: 02/15/2021
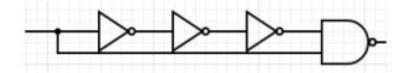
Dr. Borkar

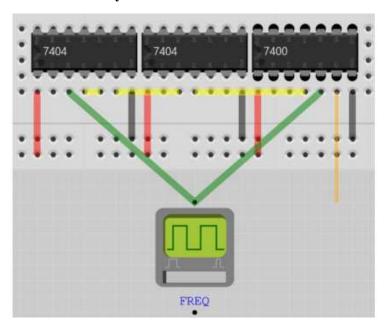Lab Instructor: Muyu Yang

Preliminary Assignment

1.

A	B	C	(AB)'	(BC)'	(AC)'	Output	Red	Green
LOW	LOW	LOW	HIGH	HIGH	HIGH	LOW	LIT	OFF
LOW	LOW	HIGH	HIGH	HIGH	HIGH	LOW	LIT	OFF
LOW	HIGH	LOW	HIGH	HIGH	HIGH	LOW	LIT	OFF
LOW	HIGH	HIGH	HIGH	LOW	HIGH	HIGH	OFF	LIT
HIGH	LOW	LOW	HIGH	HIGH	HIGH	LOW	LIT	OFF
HIGH	LOW	HIGH	HIGH	HIGH	LOW	HIGH	OFF	LIT
HIGH	HIGH	LOW	LOW	HIGH	HIGH	HIGH	OFF	LIT
HIGH	HIGH	HIGH	LOW	LOW	LOW	HIGH	OFF	LIT

2.

Schematics

Breadboard Layout

Data Table

Majority circuit

Switch 1	Switch 2	Switch 3	LED
Open	Open	Open	
Open	Open	Closed	
Open	Closed	Open	
Open	Closed	Closed	
Closed	Open	Open	
Closed	Open	Closed	
Closed	Closed	Open	
Closed	Closed	Closed	