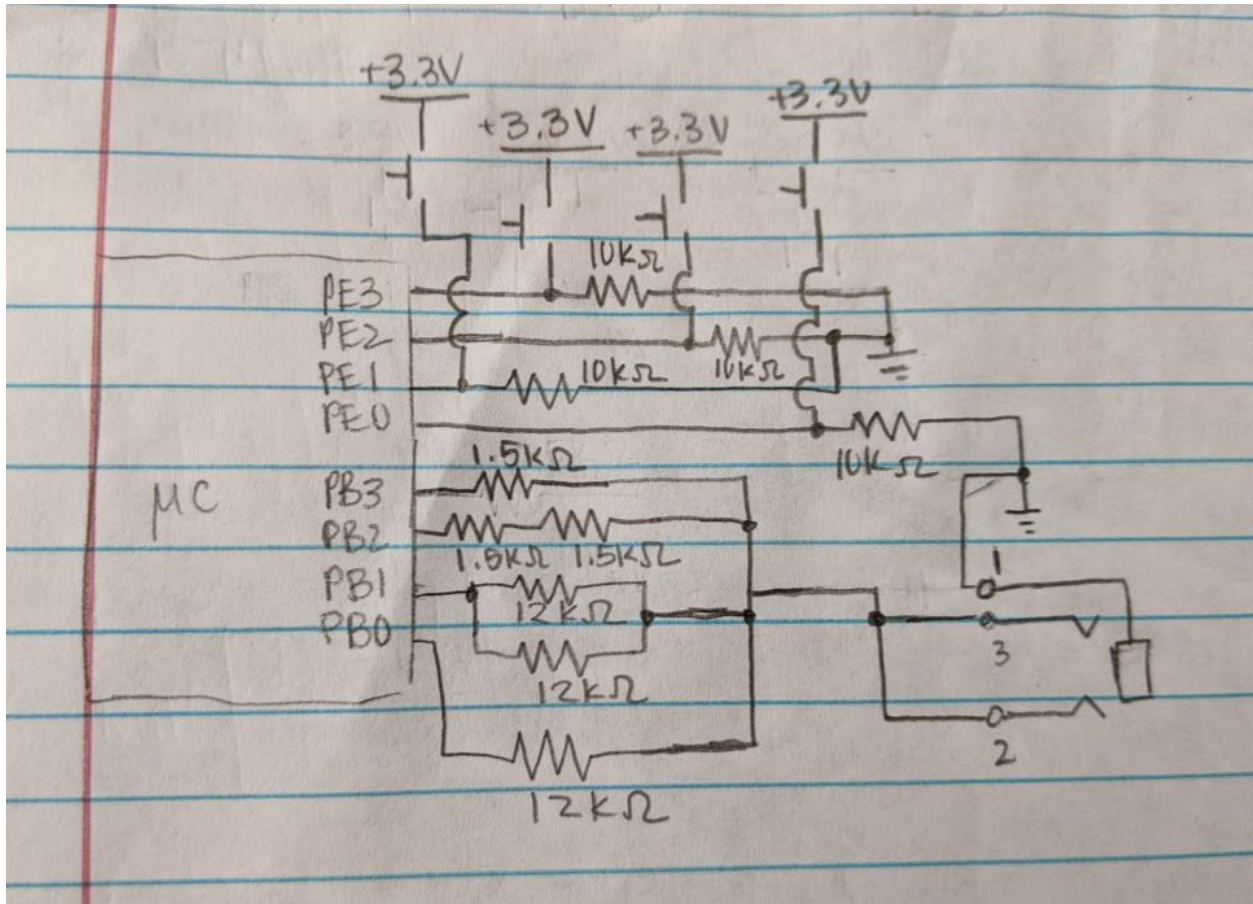


2.



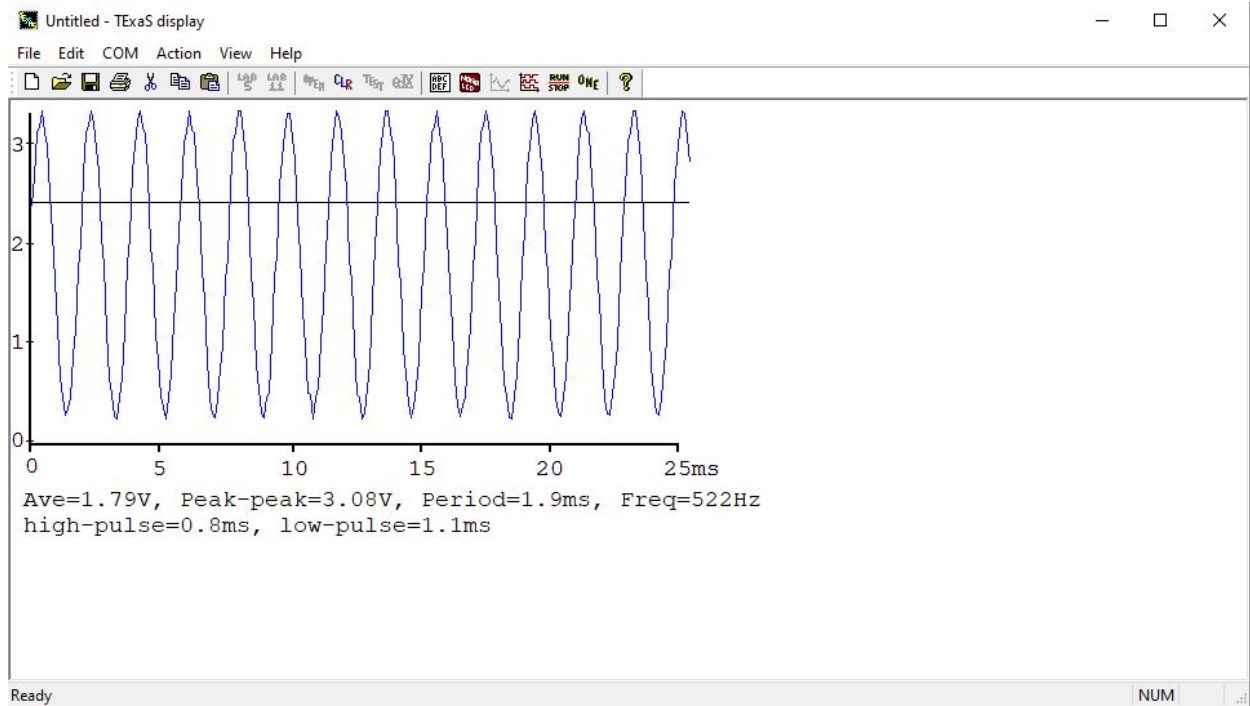
Keymap	0x2000.0000	0
	0x2000.0004	03189
	0x2000.0008	03792
	0x2000.000C	0
	0x2000.0010	04257
	0x2000.0014	0
	0x2000.0018	0
	0x2000.001C	6
	0x2000.0020	4778
	0x2000.0024	0
	0x2000.0028	0
	0x2000.002C	0
	0x2000.0030	0
	0x2000.0034	0
	0x2000.0038	0
	0x2000.003C	0



morning

0X01920	02389	0X019A0	02389
0X01924	0020K	0X019A4	0020K
0X01928	02841	0X019A8	02128
0X0192C	0020K	0X019AC	0020K
0X01930	03189	0X019B0	02841
0X01934	0020K	0X019B4	0020K
0X01938	03579	0X019B8	02128
0X0193C	0020K	0X019BC	0020K
0X01940	03189	0X019C0	02389
0X01944	0020K	0X019C4	0020K
0X01948	02841	0X019C8	02841
0X0194C	0020K	0X019CC	0020K
0X01950	02389	0X019D0	03189
0X01954	0020K	0X019D4	0020K
0X01958	02841	0X019D8	03579
0X0195C	0020K	0X019DC	0040K
0X01960	03189	0X019E0	0
0X01964	0020K	0X019E4	0
0X01968	03579		
0X0196C	0020K		
0X01970	03189		
0X01974	0010K		
0X01978	02841		
0X0197C	0010K		
0X01980	03189		
0X01984	0010K		
0X01988	02841		
0X0198C	0010K		
0X01990	02389		
0X01994	0020K		
0X01998	02841		
0X0199C	0020K		

#### 4. Note C0. Theoretical Hz = 523.3



5.

n	Actual (V)	Theory (V)
0	0.001	0.000
1	0.228	0.220
2	0.452	0.440
3	0.680	0.660
4	0.894	0.880
5	1.122	1.100
6	1.345	1.320
7	1.573	1.540
8	1.725	1.760
9	1.952	1.980
10	2.174	2.200
11	2.401	2.420
12	2.613	2.640
13	2.840	2.860
14	3.062	3.080
15	3.288	3.300

Average resolution (V)      0.219

Average Error                  0.61%

Range 15

Precision 4

6. a) Interrupt triggered when the NVIC\_ST\_CURRENT\_R changes from 1 to 0  
b) Interrupt vector is stored in the interrupt vector table in startup.s  
c) First, is to finish whatever instruction it was executing. Then, R0-R3, R12, LR, PC, and PSR are pushed onto the stack. Third, the address of the SysTick Handler in the vector table is put into PC and IPSR is set to the vector number (15). Finally, LR is set to 0xFFFFFFFF9  
d) LR was set to 0xFFFFFFFF9 which indicates that it's returning from an ISR as opposed to a function and thus, R0-R3, R12, PSR, LR, and PC are to all be popped off the stack.