

Embedded Lab Report

Team 18

Ingy Hany	6745
Rowan Tarek	6754
Mostafa Ashraf El-medany	6907
Jera Gamal Lamey	6914

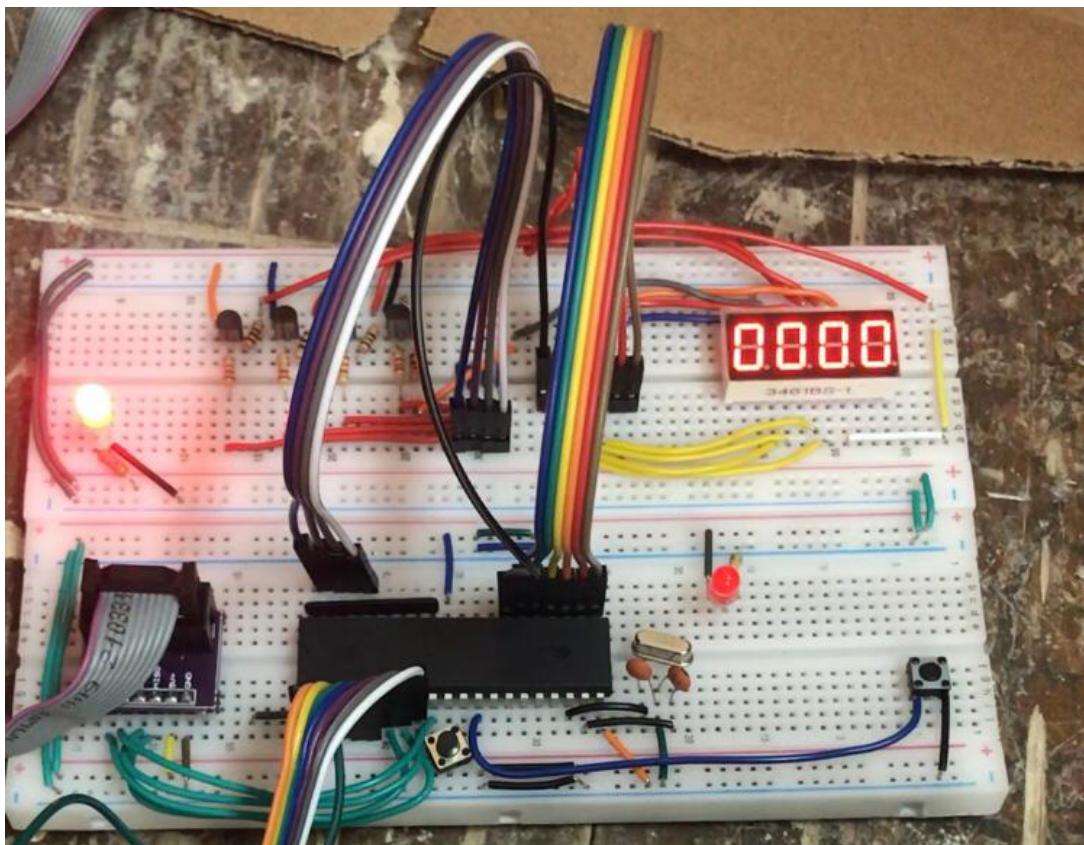
Components :

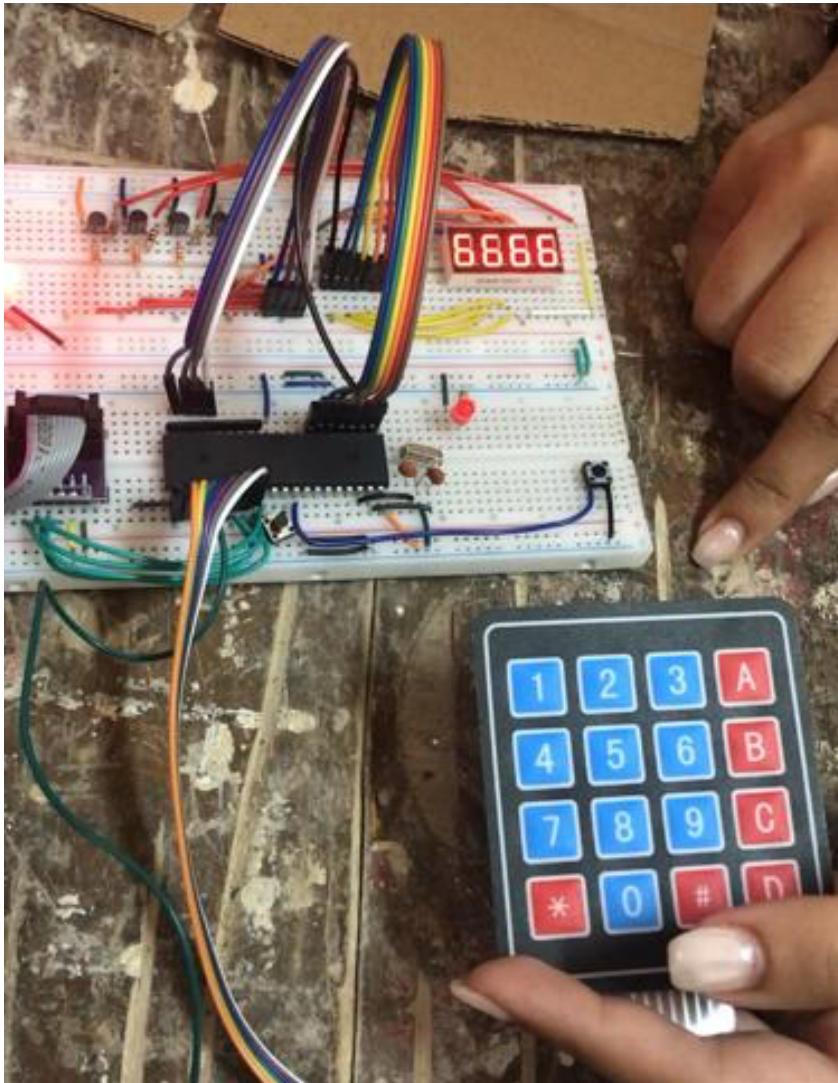
- . Keypad
- . Quad 7 segment (anode)
- . 8051 microcontroller
- . USB-ASB Programmer
- . 2 push buttons
- . Sip resistor
- . 10k ohm resistors
- . 2N3906 Transistors
- . USB 2TTL (for debugging)
- . Crystal 11.0592 MHz
- . Capacitors 33 pF

Code Functionalities :

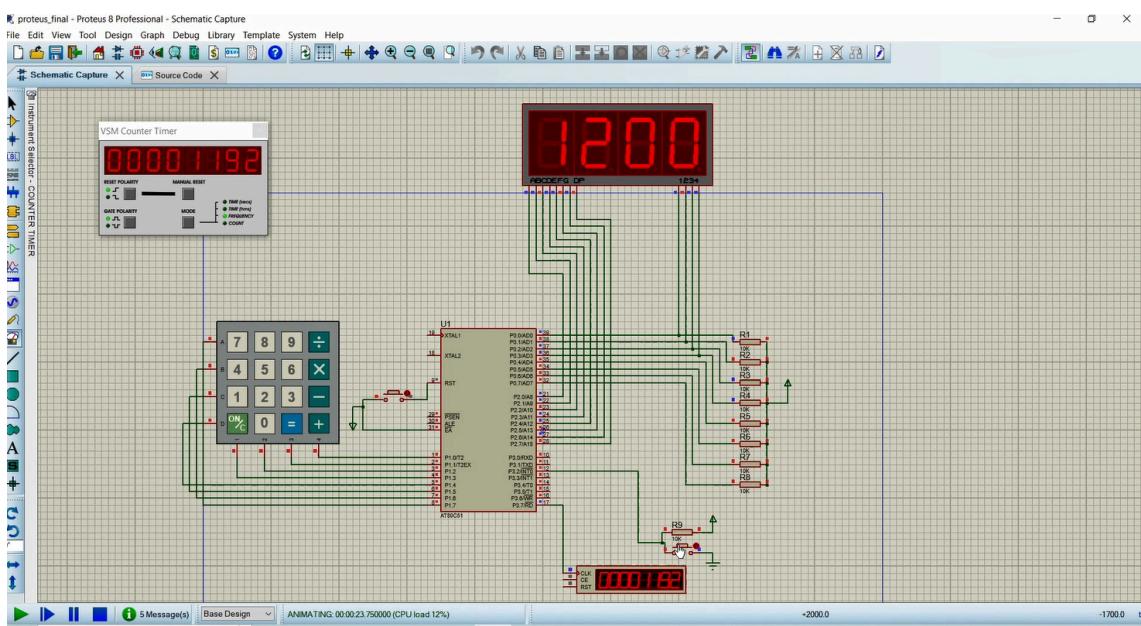
This code generates a square wave with frequencies ranging from 0 Hz to 9999 Hz by using timer interrupts and the interfacing of keypad and 7 segment to display the frequency entered.

Hardware Connections :



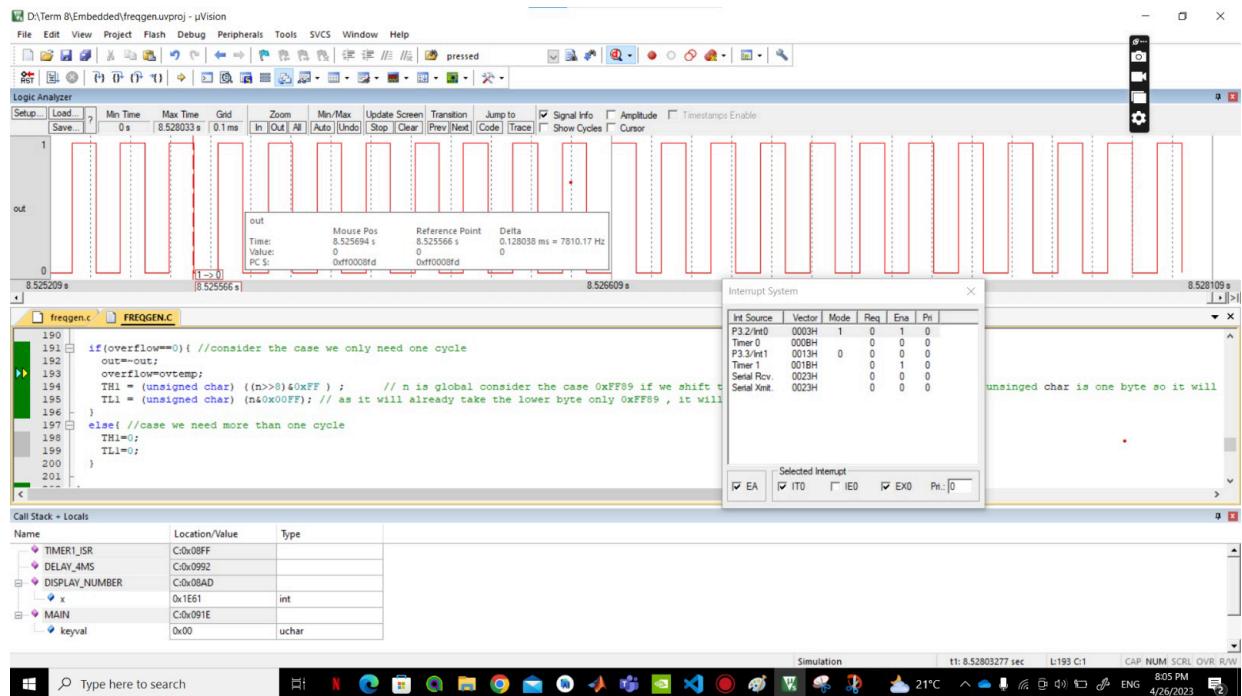


Proteus :



Kiel Simulations:

Simulation for 7 Hz :



Simulation for 7777 Hz :

