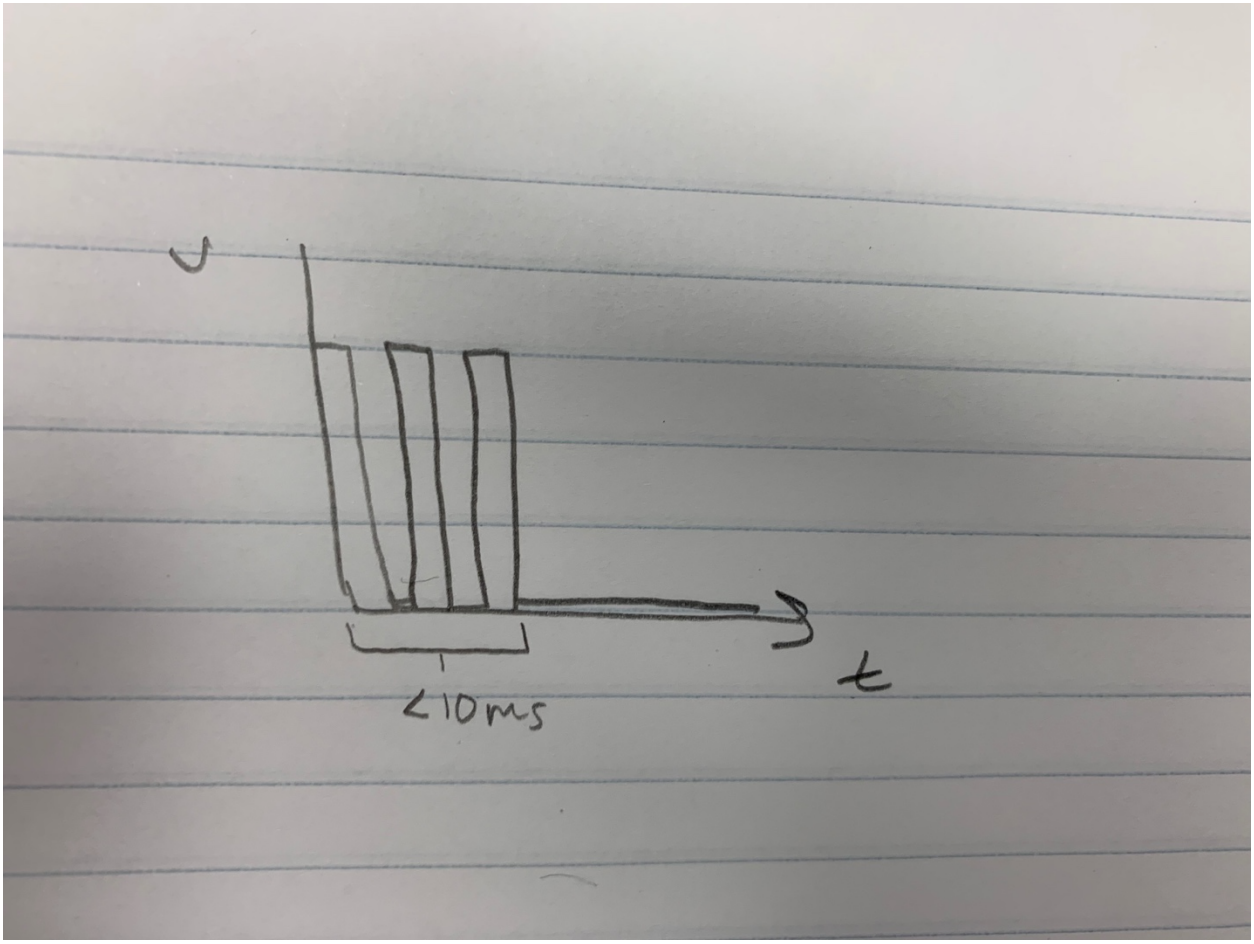
1. To debounce the button you could make a program that only counted a push that was 10ms or longer and anything shorter would be counted as a bounce. This would be done with a timer.



2. IFSx- determines if an interrupt flag is active, needs to be set back to zero after one has been activated.

   IECx- determines if an interrupt is enabled

   IPCx- the priority of the bits which determines the order they are executed and if an interrupt can interrupt another interrupt.

3. When an interrupt is generated the contents of the cpu are copied to ram then a process is completed before the cpu contents are restored. To avoid doing this, the SRS could be used which is a shadow set of memory in the cpu to avoid copying.

4. The first method uses float math which is a slower process on the pic than using ints. This could be seen in the .dis file because the first method would have more lines of

machine code than the second and one line of code is run per clock cycle so more lines = slower.