

EE 354
Assignment 3

September 19, 2018
Due: September 28, 2018

Write a program in C which will input 2 bits from port P0.0 and P0.1. Take P0.1 to be the MSB. If these two bits are 00 output 0 on the D to A converter. If they are 01 output the saw tooth waveform in the top figure below. If they are 10 output the triangular waveform in the middle figure below and if they are 11 output the square wave in the bottom figure below. For all three wave forms the waves should traverse the maximum amplitude for the D to A converter. All three wave forms may run at any frequency but they should all have the same frequency.

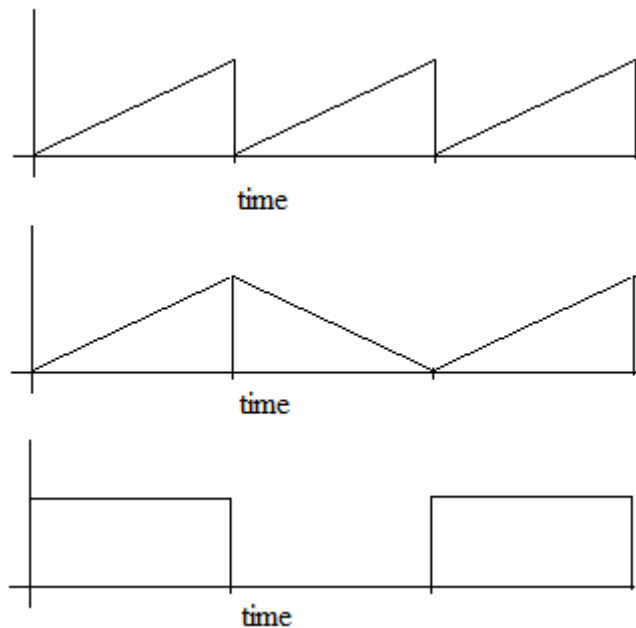


Figure 1

A sawtooth, triangular, and square wave to be output on the D to A port.

Do a demo of your program in class on the due date and turn in the following:

1. A cover sheet with your name, assignment number, and the date turned in.
2. A hard copy of your commented assembly-code.