

[Courseware \(/courses/UTAustinX/UT.6.01x/1T2014/courseware\)](/courses/UTAustinX/UT.6.01x/1T2014/courseware)

[Course Info \(/courses/UTAustinX/UT.6.01x/1T2014/info\)](/courses/UTAustinX/UT.6.01x/1T2014/info)

[Discussion \(/courses/UTAustinX/UT.6.01x/1T2014/discussion/forum\)](/courses/UTAustinX/UT.6.01x/1T2014/discussion/forum)

[Progress \(/courses/UTAustinX/UT.6.01x/1T2014/progress\)](/courses/UTAustinX/UT.6.01x/1T2014/progress)

[Questions \(/courses/UTAustinX/UT.6.01x/1T2014/a3da417940af4ec49a9c02b3eae3460b/\)](/courses/UTAustinX/UT.6.01x/1T2014/a3da417940af4ec49a9c02b3eae3460b/)

[Syllabus \(/courses/UTAustinX/UT.6.01x/1T2014/a827a8b3cc204927b6efaa49580170d1/\)](/courses/UTAustinX/UT.6.01x/1T2014/a827a8b3cc204927b6efaa49580170d1/)

[Embedded Systems Community \(/courses/UTAustinX/UT.6.01x/1T2014/e3df91316c544d3e8e21944fde3ed46c/\)](/courses/UTAustinX/UT.6.01x/1T2014/e3df91316c544d3e8e21944fde3ed46c/)

Help

How does the Nyquist Theorem apply to this lab?

If we were to add more bits to the DAC, would we need to increase the table size?

Would it have been possible to vary the frequency of the sine wave while having the interrupt frequency remain the same? If so, how could we have solved it?

How could we have made it sound like a bassoon, guitar or flute? Open the files **dac_bassoon.xls**, **dac_flute.xls**, **dac_Guitar.xls**, **dac_horn.xls**, and **dac_trumpet.xls**. How could you have used these files. (Warning, the real board grader expects a sine wave, so these data cannot be used during grading.)

To play a song, we can use another interrupt that calls **Sound_Play()**, feeding the system with the notes to play. Consider the brief song in Figure 13.6. To play this song you will have to call **Sound_Play()** six times. Think about what the parameter will be and when the calls need to be made.

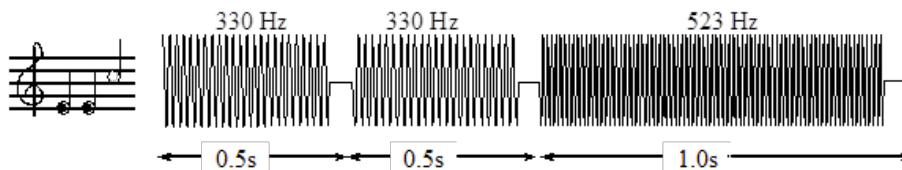


Figure 13.6. A song with three notes.

Answer:

0.00sec **Sound_Play**(E0) [329.6 Hz]

0.45sec **Sound_Play**(0) [off]

0.50sec **Sound_Play**(E0) [329.6 Hz]

0.95sec **Sound_Play**(0) [off]

1.00sec **Sound_Play**(C0) [523.3Hz]

1.95sec **Sound_Play**(0) [off]



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