Lab 2

CEG3185[A] - Intro to Data Communications & Networking

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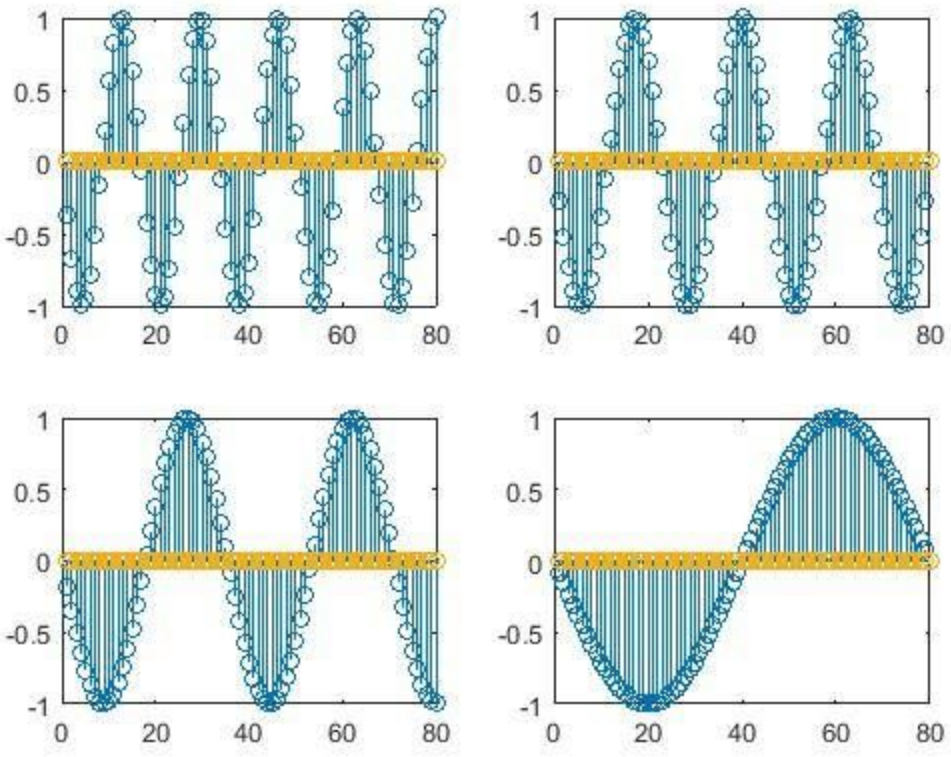
Objectives:

- To demonstrate knowledge of MATLAB and to learn basic problem solving in the MATLAB environment
- To lean how to simulate continuous signals on a digital system.
- To lean how to use matlab to visualize different aspects of a complex system.

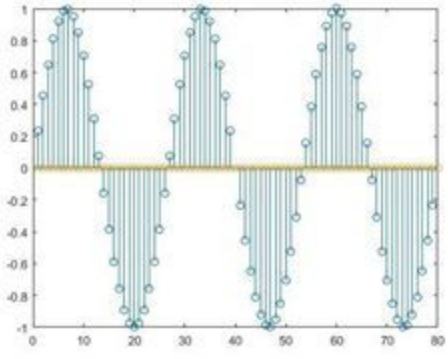
Equipment and components:

- Windows PC
- MATLAB software

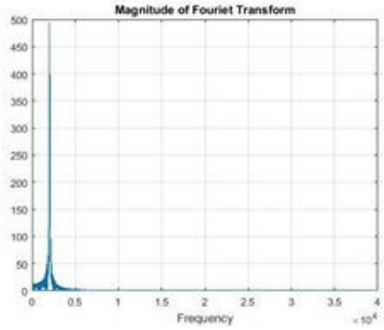
Part I:



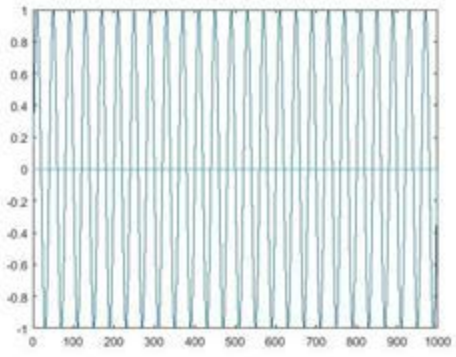
Part 1 with varied frequencies



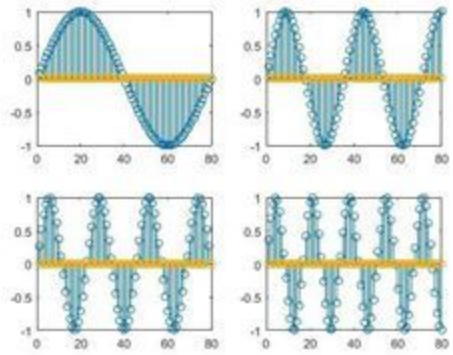
e) Continuous sinusoidal function



f) Continuous Fourier transformation



d) A/D Conversion f_s=8000



Part II:

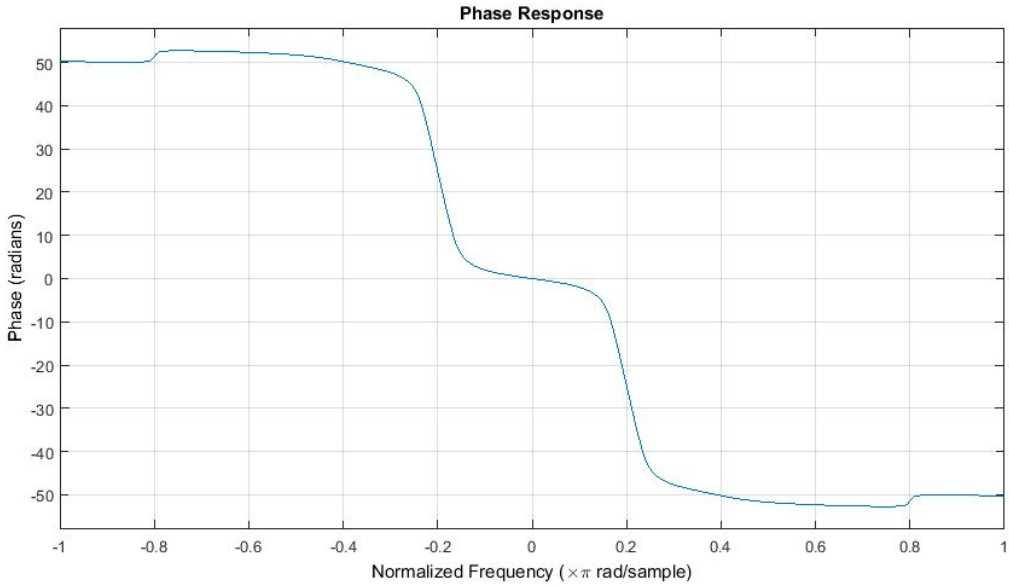


Figure 5.3(b)

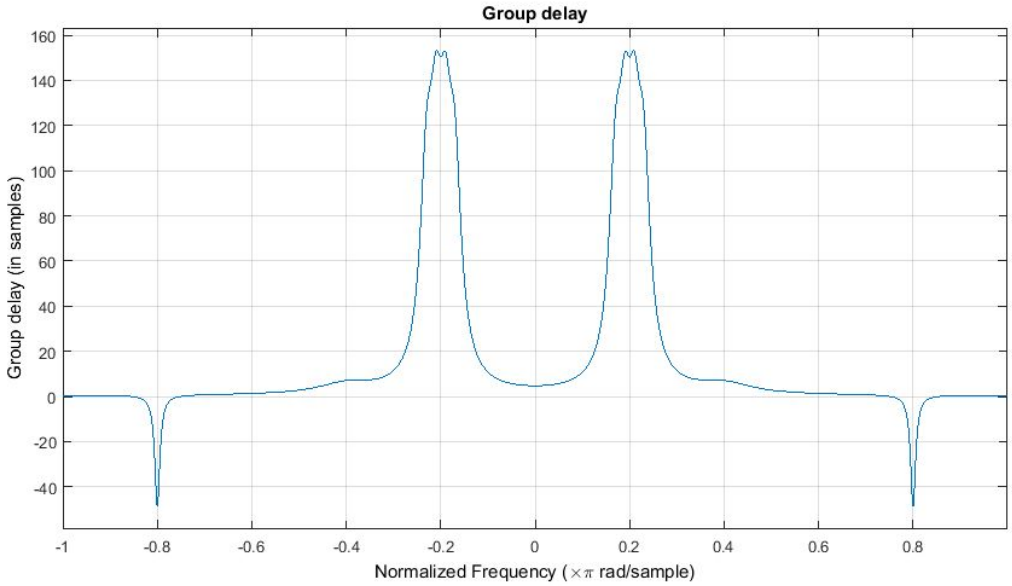


Figure 5.4(a)

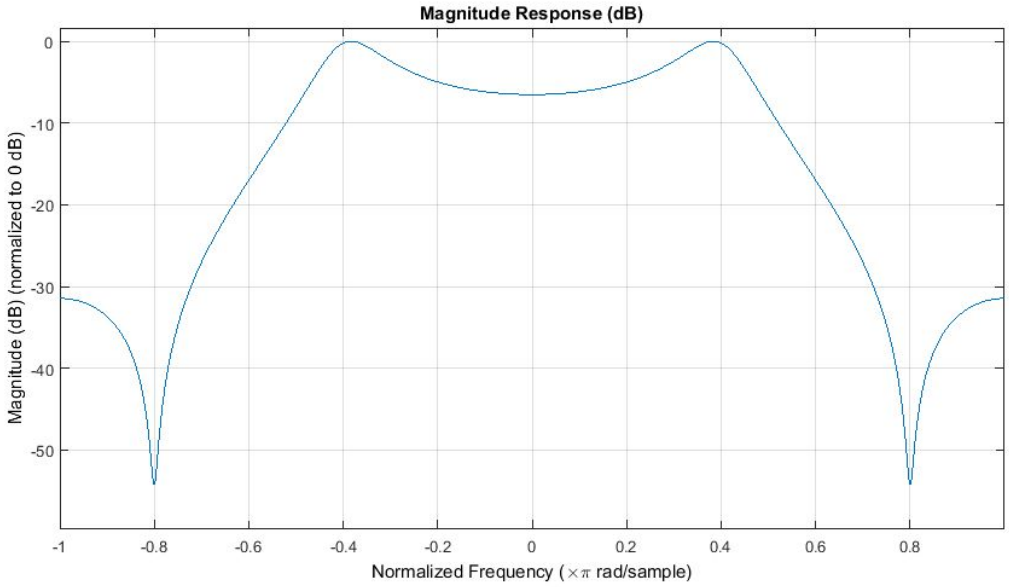


Figure 5.4(b)

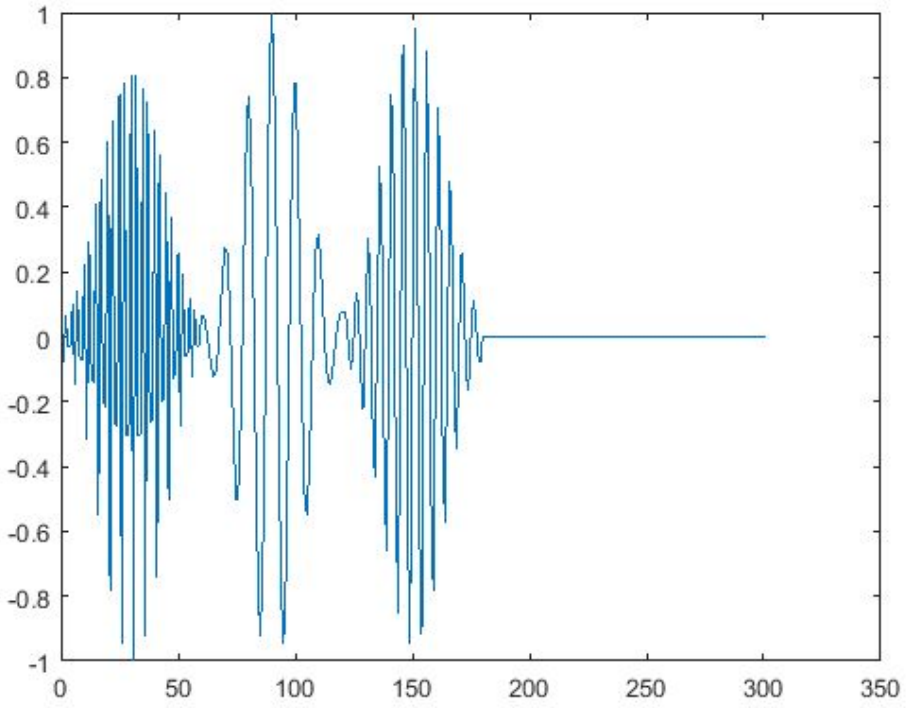


Figure 5.5

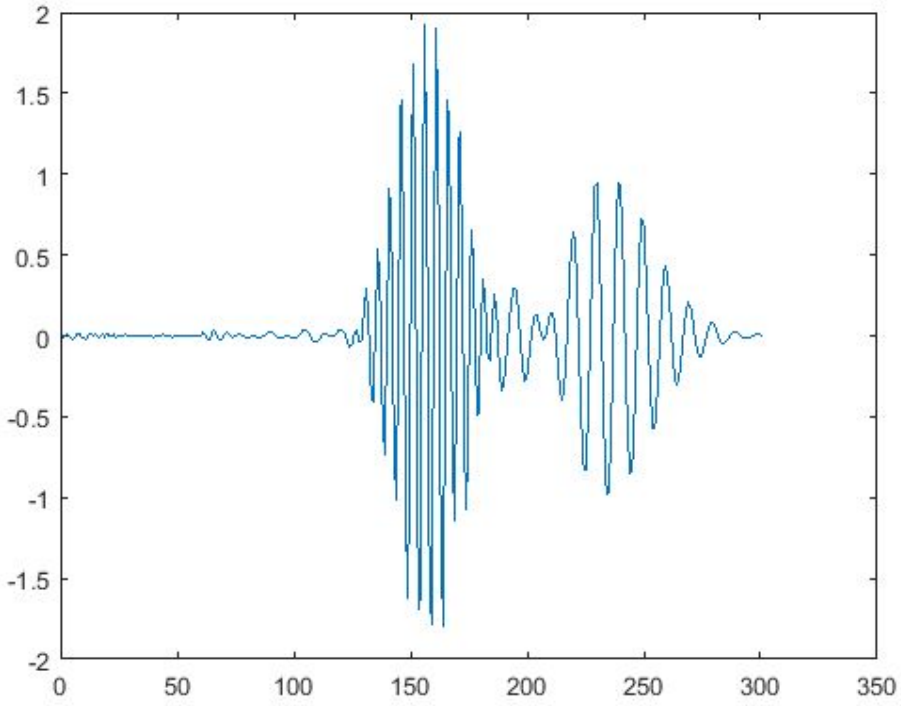


Figure 5.6

Conclusion:

In conclusion, today's lab showed us how to take a complex system and convert it into matlab and analyze different aspects of that system such as magnitude, group delay, and magnitude of frequency response. We also learned how to use Matlab to model frequencies and change time domain of a wave.