EE360D Computer Assignment HW Guidelines

Homework guidelines

* Computer Assignments are due the day (and time) that has been set by the instructor

* Online submissions must be in .pdf form

* Physical submissions should be single sided. This makes it easy to scan.

* Turn in your homework with a large title that contains your class, computer assignment number, and your name. This makes it so that when homework needs to be annotated or delivered, that it is easy to find out who's homework it is.

* The homework problem number/statement/question should be placed before the solution

* Your MATLAB code should be visible (no hidden edits). Theoretically if the homework were to be copy/pasted into a new file, then your code should generate what you have submitted in your PDF. Make sure to use "clear variables" to remove outside variables that will not be found in your HW.

* Your MATLAB code should have comments detailing what attempt you have made to obtain the solution.

* MATLAB figures/results should always follow, and be integrated with a problem's solution. Therefore, you should be creating clear sections (%% and **make sure to include a space between the double percent and your section title**) in order to keep your questions integrated your solutions.

- An Example of good section organization

MATLAB Example:

```
1    %% Master Title
2    %% Section Title 1
3    % Section Description 1
4
5    % Comment a
6
7    %% Section Title 2
8    % Section Description 2
9    %
10   % Newline for Section Description 2
11
12   %{
13      Comment b
14      Comment c
15   %}
16
17   %%Comment d
18
```

Published Results:

Master Title

Table of Contents

Section Title 1

Section Description 1

    % Comment a

Section Title 2

Section Description 2

Newline for Section Description 2

```
%{
   Comment b
   Comment c
%}
%%Comment d
```

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- Organized Computer Assignments = Happy Grader

* MATLAB figures should *never* be tacked on to the end of a homework set (you will lose points!)

* When possible, use the subplot() function to minimize paper usage.

* Your figures should always contain titles/labels/details on them so it's easy to identify what's being shown. It is encouraged that you should also contain (when possible) the problem/equation in your titles to make it easier to see what your figure represents.

* Always (and read this again) suppress your code with semi-colons unless when necessary. Having unsuppressed code results in unwanted (and difficult to read) values that will get tacked onto a solution. This also results in a huge waste of paper.

* For physical submissions, staple your homework together in the top left corner (only). If a staple won't make it through your thick assignment, then you need to redo the assignment and make things clearer and simpler (and thus use fewer sheets of paper). Again, only one side should be used.

* Do not use one whole sheet of paper, a cover sheet, for your name and the homework number. These can be included on the top of the page containing the table of contents.

* The table of contents should be clear to read and should be helpful for finding your individual solutions.

EE360 - Computer Assignment I by David S.

Table of Contents

Header including name and homework number at the **top** of the page.

Clear table of contents that shows exercises, sections, subsections, and page numbers

Exercise 1: Gerating Signals

Generate the following signals for $-5 \geq n \geq 5$, by typing an explicit list of elements

```
close all % Close figures
```

1

Visible name

Back of the page is BLANK.

Clear sections, visible code, and titled figures

```
clear variables % Clear everything
n = -5:5; % Intervals
```

Ex 1a: The Unit Impulse Sequence

```
delta = [0,0,0,0,0,1,0,0,0,0,0]; % Unit Impulse

figure(1)
stem(n,delta,'filled','-g','linewidth',3)
title("Ex 1a: The Unit Impulse Sequence, \delta[\itn\rm]")
xlabel('n')
ylabel('Value')
prettyGraph
```


Ex 1a: The Unit Impulse Sequence, $\delta[n]$
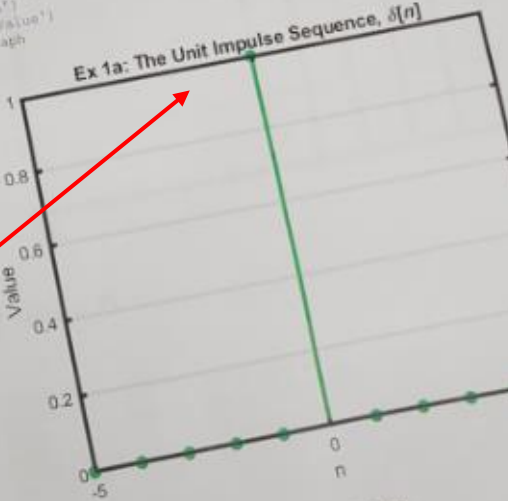
Ex 1b: The Unit Step Sequence

```
unitstep = [0 0 0 0 0 1 1 1 1 1 1]; % 2 Ways of writing it
u = [zeros(1,5),ones(1,6)]; %

figure(2)
stem(n,u,'filled','-r','linewidth',3)
title("The Unit Step Sequence, \itu\rm[\itn\rm]")
xlabel('n')
ylabel('Value')
prettyGraph
```

The signal, $h[n] = z[-n]u[n]$

Clear figure title on what the problem is asking

[Figure: stem plot with y-axis labeled "Value" ranging from 0 to 1, x-axis labeled "n" ranging from -5 to 5]
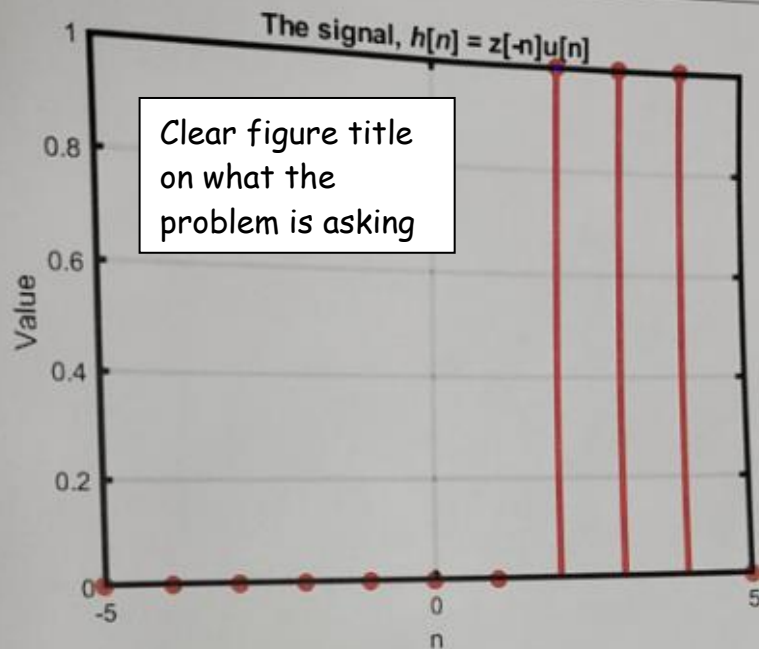
Exercise 4: Generating longer signals

Generate the following signals for $-25 \geq n \geq 25$. Use estimated hand calcs for $-3 \geq n \geq 3$ to verify that the generated signals are correct. (Note, you don't need to turn in hand calcs).

```
clear variables
n = -25:25;  % Exte
```

Ex 4a: delta[n]

Sections with discussion on what the next set of problems will be based off of.
Note, there is also a subsection

```
delta = [zeros(1,a

figure(14)
stem(n,delta,'fill
title('The Unit Impulse Sequence,
xlabel('n')
ylabel('Value')
prettyGraph
```

Page number!