

Publishing

http://www.mathworks.com/help/techdoc/matlab_env/f6-30186.html

File -> publish

- Cell -> Insert Text Markup ->
 - Document Title & Introduction

The image shows three windows illustrating the MATLAB publishing process:

- Editor - Untitled* (Left):** Shows the initial MATLAB script with comments for document structure:

```
1 %% DOCUMENT TITLE
2 % INTRODUCTORY TEXT
3 %%
4 % Define the range for x.
5 % Calculate and plot y = sin(x).
6 % Display plot in published MATLAB code.
7 x = 0:1:6*pi;
8 y = sin(x);
9 plot(x,y)
10 title('Sine Wave', 'FontWeight','bold')
11 xlabel('x')
12 ylabel('sin(x)')
13 set(gca, 'Color', 'w')
14 set(gcf, 'MenuBar', 'none')
```
- Editor - Untitled* (Middle):** Shows the script after inserting text markup (highlighted in yellow):

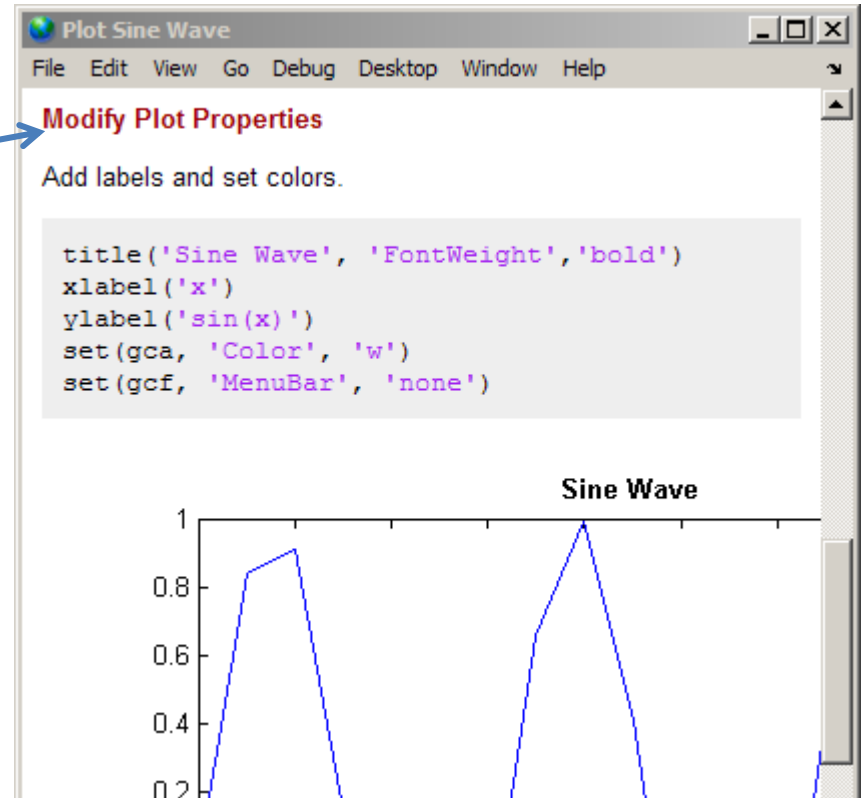
```
1 %% Plot Sine Wave
2 % Calculate and plot a sine wave
3 %%
4 % Define the range for x.
5 % Calculate and plot y = sin(x).
6 % Display plot in published MATLAB code.
7 x = 0:1:6*pi;
8 y = sin(x);
9 plot(x,y)
10 title('Sine Wave', 'FontWeight','bold')
11 xlabel('x')
12 ylabel('sin(x)')
13 set(gca, 'Color', 'w')
14 set(gcf, 'MenuBar', 'none')
```
- Web Browser - Plot Sine Wave (Right):** Shows the published HTML output. The title "Plot Sine Wave" is in red. The introductory text "Calculate and plot a sine wave." is in black. The code block is in a grey background:

```
Plot Sine Wave
Calculate and plot a sine wave.
Define the range for x. Calculate and plot y = sin(x). Display plot in published document.
x = 0:1:6*pi;
y = sin(x);
plot(x,y)
title('Sine Wave', 'FontWeight','bold')
xlabel('x')
ylabel('sin(x)')
set(gca, 'Color', 'w')
```

Blue arrows indicate the mapping from the code in the middle editor to the rendered HTML in the web browser.

Section title

```
Editor - I:\my_MATLAB_files\sine_wave.m*
File Edit Text Go Cell Tools Debug Desktop Window Help
5 % Define the range for x.
6 % Calculate and plot y = sin(x).
7 % Display plot in published MATLAB code.
8 x = 0:1:6*pi;
9 y = sin(x);
10 plot(x,y)
11 %% Modify Plot Properties
12 % Add labels and set colors.
13 title('Sine Wave', 'FontWeight','bold')
14 xlabel('x')
15 ylabel('sin(x)')
16 set(gca, 'Color', 'w')
17 set(gcf, 'MenuBar', 'none')
```



```

%%
% Some text formatting options are:
%
% * BOLD TEXT
% * _ITALIC TEXT_
% * |MONOSPACED TEXT|

%%
% Paragraphs where the first line begins with
% two spaces become pre-formatted text.

%%
%
% $f(x)$ is defined as follows:
%
% $$ f(x) = \sqrt{x^2 + \frac{x}{e}} $$

%%
% * BULLET ITEM1
% * BULLET ITEM2
%
% # NUMBERED ITEM1
% # NUMBERED ITEM2
%

%%
% <http://sacan.biomed.drexel.edu SacanLab>

%%
% * <matlab:sqrt(4) click here for sqrt(4)>
% * <matlab:plot(rand(1,10)) click here for a random plot>

%%
% <html>
% <a href="http://sacan.biomed.drexel.edu"> Sacanlab </a>
% 
% <table border=1>
% <tr> <th>Name <th>Department
% <tr> <td>Ahmet Sacan <th>Biomed
% </table>
% </html>

```

Some text formatting options are:

- **BOLD TEXT**
- *ITALIC TEXT*
- MONOSPACED TEXT

Paragraphs where the first line begins with two spaces become pre-formatted text.

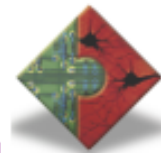
$f(x)$ is defined as follows:

$$f(x) = \sqrt{x^2 + \frac{x}{e}}$$

- BULLET ITEM1
 - BULLET ITEM2
1. NUMBERED ITEM1
 2. NUMBERED ITEM2

[SacanLab](http://sacan.biomed.drexel.edu)

- [click here for sqrt\(4\)](#)
- [click here for a random plot](#)



[Sacanlab](#)

Name	Department
Ahmet Sacan	Biomed

