

The m-file function skeleton

Here I will be authoritarian, pedantic, bossy, rigid, narrowminded, blah, blah, blah. Nevertheless, I will rap your knuckles if your function m-file does not conform to the following form.

1. blank line(s) if you like
2. `function [output variables] = functionname(input variables)`
3. blank line(s) if you like
4. `main comment block` (this is what the user sees if they type `>> help functionname` in the Matlab command window)
5. at least one blank line
6. `your code and/or more documentation` (which will not appear in help)

Here is what the file `functionname.m` might look like in your editor:

```
function [o1,o2,...,om] = functionname(i1,i2,...im)

%function [o1,o2,...,om] = functionname(i1,i2,...im)
%
% Briefly state what the routine does
%
% Unambiguously describe each input variable & any of its necessary properties.
%
% Unambiguously and completely describe for the user every output variable.
%
% Here write anything else you would like to say to a user typing
% >> help functionname
% This often includes your name and revision information, calls to functions
% not built-in to Matlab, related m-files, etc.
```

Here (after one or more blank lines) begins your code, or other comments not to be included in help.

Every line in the `main comment block` must begin with a `%` (no blank lines). The main comment block *must* (i) first repeat the function line, (ii) describe what the routine does, (iii) describe the input variables, and (iv) describe the output variables. I have put colors in only to emphasize that function m-files have 3 parts.