

# Matlab Programming Documentation

Solutions to programming assignments in this class should be provided as functions in .m files (no scripts should be used). Each function should include the following header information:

```
function <output variables> = CS4300_<name>(<input variables>)
% CS4300_<name> - brief description of function
% On input:
%   <input variable 1> (type): <short description>
%   ... <input variable m> (type): <short description>
% On output:
%   <output variable 1> (type): <short description>
%   ... <output variable n> (type): <short description>
% Call:
%   <var1> = CS4300_<name>(<var list>);
% Author:
%   Your name
%   UU
%   Fall 2016
%
```

Here is an example of a specific function:

```
function res = CS4300_A1_Part_II(num_trials)
% CS4300_A1_Part_II - get behavior data from trace of trial
% On input:
%   num_trials (int): number of trials to run (e.g., 200)
% On output:
%   res (1x2 array): results of trial
%   (1): mean number of times arrived at gold
%   (2): mean number of steps
%   (3): variance on arrival at gold
%   (4): variance on number of steps
%   (5): coi for arrival at gold
%   (6): coi for number of steps
% Call:
%   r = CS4300_A1_Part_II(2000);
% Author:
%   T. Henderson
%   UU
%   Summer 2015; modified Summer 2016
%
```