

Variable Argument
Lists (v. 1.0)

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How Does *fprintf* Work?

- Normally, when you create a function you specify the names (and therefore the number) of input and output arguments.
- But *fprintf* accepts any number of arguments after the control string.
- Matlab, like most other modern computer languages, has a mechanism for variable argument lists.

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Special Variables

- Special automatically created variables are available within Matlab functions to support determining the number of arguments specified in its call and to support variable numbers of arguments.
- The first set of these is *nargin* and *nargout*.

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Using *nargin* & *nargout*

- As you might guess, *nargin* stands for and contains the **number of arguments input**.
- And, *nargout* stands for and contains the **number of arguments output**.
- See my *nargtest* function for an example of their use.

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varargin and *varargout*

- There are also two special variable names that can be specified to accept variable numbers of input and output arguments, respectively.
- They are always cell arrays.
- They must be specified in the function code and **must always be the last arguments** in the respective lists.
- See my *vargtest* function.

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Activity

- Modify your mmHg2kPa function to accept the local atmospheric pressure (as an optional second argument) in mm Hg or kPa (as an optional third argument that is required if there is a second argument).
- The units should be specified as a regular string (either 'mm Hg' or 'kPa').

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