Matlab script or command: a collection of commands to perform a task (such as solve a homework problem). May contain input statements and typically does have printed output.

(by contrast, a function performs a single task - accepts input parameters via command line and returns one or more values. Typically, no I/O inside function.)

I/O: Input from user.

Matlab function for INPUT:
Value = input('prompt string')

string constant

e.g.

n = input('enter number n:')

disp is used to display a variable

[] to concatenate strings

Function file.

Syntax:

function [output] = filename(input)

Keyword: {statements to generate output}

Output variables must be assigned

return

Example: compute tan angle = \frac{y}{x}

\[ \begin{align*} 
\tan \theta &= \frac{y}{x} 
\end{align*} \]
Script file to work with this function.