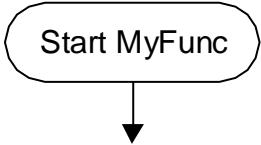
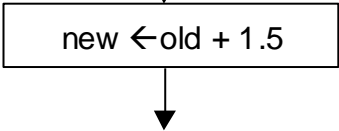
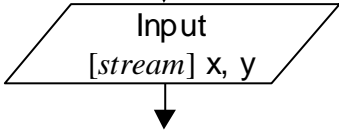
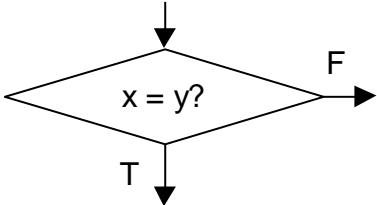
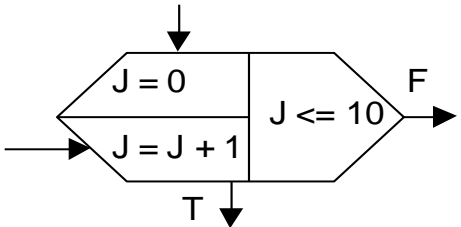
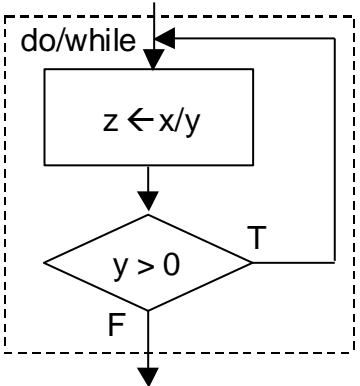
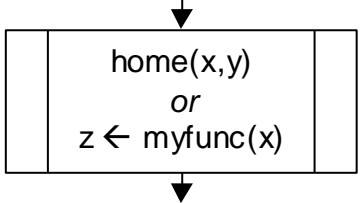


Operation	Flowchart Symbol	Pseudocode	Indented Matlab Examples
Begin or End of Algorithm		Begin myFunc End myFunc	<pre>function res = myFunc(arg) ... end</pre>
Process/Assignment		$new \leftarrow old + 1.5$ -or- $old + 1.5 \rightarrow new$	<pre>new = old + 1.5;</pre>
Input/Output		Input <i>z</i> from <i>source</i> Output <i>x</i> & <i>y</i> to <i>dest</i>	<pre>z = input('Enter value: '); disp(['Result = ' result]); fprintf(outfile, 'x = %5.2f', x);</pre>
Selection		if <i>cond</i> then <i>block</i> else <i>block</i> next step	<pre>if x == y ... else ... end</pre> <p>See also switch/case and try/catch.</p>
Counter Controlled Loop		for <i>j</i> = 1, 10 <i>block</i> next step	<pre>for ind = 1:10 ... end</pre>

<p>Structured Repetition</p>		<p>while <i>cond</i> <i>block</i> next step</p>	<pre>while y <= YMAX ... end</pre>
<p>General Repetition (See note below)</p>	<p>See <i>Selection</i> and <i>Structured Repetition</i> symbols</p>	<p>while <i>block</i> if <i>cond</i> break <i>block</i> next step</p>	<pre>while true ... if isDone, break, end ... end</pre>
<p>Function Call</p>		<p>home(x,y) z ← myfunc(x) -or- myfunc(x) → z</p>	<pre>plot(myX, myY); z = mix(x, y);</pre>

Notes and Comments:

- In this table, the flowchart, pseudocode and Matlab examples do not generally correspond (i.e., they don't necessarily represent the same action).
- Use indentation to show structure in pseudocode and Matlab source code. This is critical for creating readable code.
- *cond* is a logical condition (a Boolean expression).
- *next step* mans the next step in the algorithm. In Matlab, this can generally be any statement.
- *source* and *dest* means any open data source or destination of the appropriate type.
- Some coding styles prohibit "General Repetition" structures. If general repetition is used, there should only be one way in and one way out. Some of the Matlab examples shown use comas to keep if constructs on a single line (which is generally not good practice).