Topics: Problem solving, MATLAB program, variable & assignment, input, sequential execution
Reading (ML): Sec 3.1, 3.2, 2.1, 2.2, 2.5, 2.8 (exclude matrix operations), 2.9
(JV): p 1–23 optional

Steps in Problem Solving

Definitions

- **Algorithm**: a set of procedures for solving a problem
- **Program**: an algorithm written in some language
- **Variable**: a named space or location for storing a value
- **Assignment**: the action of putting a value into a named space (variable)
- **Expression**: a combination of operators and operands (variables, constants)

Example: Temperature conversion

\[(40-32)*5/9 \quad \% \text{ convert temp from F to C}\]

\[
\%	ext{ Convert temp from F to C}
\text{tempF} = 42;
\text{tempC} = (\text{tempF}-32)*5/9
\]

*Sequential execution of statements*

Input statement

Syntax: \[ \text{variable} = \text{input('prompt')} \]