

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 % convert temp from F to C
```

```
% Convert temp from F to C  
tempF = 42;  
tempC = (tempF-32)*5/9
```

Sequential execution of statements

Input statement

Syntax: `variable = input('prompt')`