**CHAPTER 2 “lab gems”**

* **Built-in input function reads input from keyboard**
  + **Returns the data as a string**
  + **Format: *variable* = input(*prompt*)**
    - **prompt is typically a string instructing user to enter a value**
  + **Does not automatically display a space after the prompt**
* **Built-in functions convert between data types**
  + **int(*item*) converts *item* to an int**
  + **float(*item*) converts *item* to a float**
  + **Nested function call: general format: *function1*(*function2*(*argument*))**
    - **value returned by function2 is passed to function1**
  + **Type conversion only works if item is valid numeric value, otherwise, throws exception**
* **Python operator precedence:**
  + **Operations enclosed in parentheses**
    - **Forces operations to be performed before others**
  + **Exponentiation (\*\*)**
  + **Multiplication (\*), division (/ and //), and remainder (%)**
  + **Addition (+) and subtraction (-)**
* **Higher precedence performed first**
  + **Same precedence operators execute from left to right**
* **Data type resulting from math operation depends on data types of operands**
  + **Two int values: result is an int**
  + **Two float values: result is a float**
  + **int and float: int temporarily converted to float, result of the operation is a float**
    - **Mixed-type expression**
  + **Type conversion of float to int causes truncation of fractional part**
* **Any part of a statement that is enclosed in parentheses can be broken without the line continuation character.**

**total = (value1 + value2 +**

**value3 + value4 +**

**value5 + value6)**

**print("Monday's sales are", monday,**

**"and Tuesday's sales are", tuesday,**

**"and Wednesday's sales are", Wednesday)**