Python Built-in Functions -- a partial list

Python has a large number of built-in functions that can be used directly in any program.  We have studyed some of them already: input(), print(), float(), int(), str() and format(), for example.  Here are a few more functions built in to the Python language that may be useful.

* **abs(n)** -- returns the absolute value of a number.  The number returned is always positive, and has the same magnitude as the parameter ***n***.  The data type of the number returned is the same as the data type of the parameter.
* **round(n)** -- returns the integer value closest to the number ***n***.  When 'round' is used with one argument, as shown, the data type of the value returned is type ***int***, and value is the closest integer value to ***n***.  If two integers are equally close to ***n***, the even number is returned.
* **round(n, d)** -- when used with two arguments, round() returns ***n***rounded to ***d***digits after the decimal point.  The data type of the value returned is the same as the data type of ***n***.
* **len(s)** -- returns the number of elements in the sequence ***s***.  A ***string***is a sequence of characters, so len(s) can be used to find the number of characters in a string.
* **type(x)** -- returns the data type of the object ***x***.
* **min(...)** -- returns the minimum value among all those provided as arguments.  The arguments may be two or more individual numbers (i.e. two or more expressions that evaluate to a numerical type).  Alternately, a single "iterable" object (e.g. a ***list***) may be provided as an argument.
* **max(...)** -- returns the maximum value among all those provided as arguments.  The arguments may be two or more individual numbers (i.e. two or more expressions that evaluate to a numerical type).  Alternately, a single "iterable" object (e.g. a ***list***) may be provided as an argument.

**Important note about rounding:** Normally you will round values **only** for presentation to the user.  It is generally best to use the format() function to do this in the "output" section of your program.  The only reason you would ever need to use the round() function is if you need to use a rounded value in further calculations.  The round() function returns a number (either type ***int***or type ***float***), whereas the format() function always returns a string (type ***str***) value.