

Basic variable types

Basic variables types

Type	Abbreviation	Example
integer	int	1, 100, 25034
float	float	1.20, 5.00, 134.45666
string	str	"this is a string", 'this is also a string'
boolean	boolean	True, False

Why does it matter?

- Some operations can not be done on certain types.
- Examples:
 - You can not add strings to integers or floats
 - You can not divide a string by a float
- Somewhat surprising examples
 - You can multiply a string by an integer (but not a float)
 - You can divide booleans by floats

Converting

		from...			
		integer	float	string	boolean
to...	integer		int(x)	int(x)	int(x)
	float	float(x)		float(x)	float(x)
	string	str(x)	str(x)		str(x)
	boolean	bool(x)	bool(x)	bool(x)	

Shaded cells: whether this operation is possible depends on the value of x

Later we will see some more variable types

- Lists
 - Tuples
 - Dictionaries
 - Arrayss
-
- Different packages can define their own types.
 - Different types support different operations.