Data Types in Phyton

“Hello, World!” - is an object with data type called ‘str’ (string).

1,2,3,4 - (whole numbers) are data type called ‘int’(integer).

1.2, 2.9 - (fractional numbers) are data type called ‘float’.

True, False – has a data type called ‘bool’(boolean).

None – used to represent absence of a value and the data type is ‘NoneType’

Vocabulary

**comment** : A line (or part of a line) of code written in English (or another language) preceded by a special symbol that lets the programming language you are using know it should ignore that line (or part of a line) of code.

**keyword** : A word with a special meaning in Python. You can see all of Python’s keywords at <http://zetcode.com/lang/python/keywords>

**constant** : A value that never changes.

**variable** : A name assigned to a value using the assignment operator

**assignment** **operator** : The = sign.

**increment** : Increasing the value of a variable.

**decrement** : Decreasing the value of a variable.

**data** **type** : A category of data.

**object** : A data value in Python with three properties: an identity, a data type and a value.

**string** : An object with a data type str. Its value is a sequence of one or more characters surrounded by quotes.

**integer** : An object with a data type int. Its value is a whole number.

**float** : An object with a data type float. Its value is a fractional number.

**boolean** : An object with a data type bool. Its value is either True or False .

**nonetype** : An object with a data type NoneType. Its value is always None .

**syntax** : T he set of rules, principles, and processes that govern the structure of sentences in a given language, specifically word order .

**syntaxerror** : A fatal programming error caused by violating a programming language’s syntax.

**exception** : A nonfatal programming error.

**operator** : Symbols used with operands in an expression. Arithmetic

**operator** : A category of operators used in arithmetic expressions.

**operand** : A value on either side of an operator.

**expression** : Code with an operator surrounded by two operands. order of

**operations** : A set of rules used in mathematical calculations to evaluate an expression. Comparison

**operator** : A category of operators used in expression that evaluate to either True or False .

**logical operator** : A category of operators that evaluate two expressions and return either True or False

**control structure** : A block of code that makes decisions by analyzing the values of variables

**conditional statement** : Code that is able to execute additional code circumstantially.

**if else statement** : A way for programmers to say “if this happens do this, otherwise do that.”

**if statement** : The first part of an if else statement.

**else statement** : The second part of an if else statement.

**elif statement** : S tatements that can be indefinitely added to an if else statement to allow it to make additional decisions.

**statement** : A command or a calculation.

**simple statement** : A statement that can be expressed in one line of code

**compound statement** : A statements that generally spans multiple lines (but can be written in one line in some circumstances).

**clause** : The building blocks of compound statements. A clause is made up of two or more lines of code: a header followed by a suite (s) .

**header** : A header is a line of code in a clause containing a keyword followed by a colon and a sequence of one or more lines of indented code.

**suite** : A line of code in a clause controlled by a header.