Wiki - Week zero | An Introduction to Interactive Programming in Python

Comments — CodeSkulptor

- Non-computational parts of the program that textually describe the behavior of the program.
- Comments begin with #, everything to right of the hash is ignored by Python.
- Comments should be frequent so you and others can understand the code.
- Lecture examples - CodeSkulptor
- More examples - Comments, Strings, and Print

Strings — CodeSkulptor

- Sequence of characters enclosed by a pair of single or double quotes
- Examples are "cats hate dogs" and 'Strings are fun!'.
- Strings are one kind of data in Python. Their data type is denoted str.
- Lecture examples - Hello World
- More examples - Comments, Strings, and Print

Numbers — Arithmetic Expressions

- There are two kinds of numerical data in Python: integers and decimal numbers.
- Integers correspond to the data type int. Decimal numbers are represented by floating-point numbers corresponding to the data type float.
- Floating-point numbers have around 15 decimal digits of accuracy.
- In CodeSkulptor, all numbers (even integers) are represented internally as floating-point numbers.
- Lecture examples - Arithmetic Expressions
- More examples - Floats and Ints

Arithmetic Operators — Arithmetic Expressions

- Five basic arithmetic operators; addition (+), subtraction (-), multiplication (*), division (/) and exponentiation (**)
- In CodeSkulptor, the division operator (/) returns a floating point approximation to the exact answer (as in Python 3 and Javascript).
- This answer differs from Python 2.6 where the division operator (/) computes integer division (the floor of exact division).
- The integer division operator is // in all versions of Python.
- Lecture examples - Arithmetic Expressions
- More examples - Arithmetic Operations, Division

Arithmetic Expressions — Arithmetic Expressions
Variables — Variables

- Variable names consist of a sequence of letters, number and underscores (_).
- Variable names start with a letter or underscore and are case sensitive.
- Single equals (=) is used for assignment to variables. Double equals (==) is used for testing equality.
- Lecture examples - Variables
- More examples - Variable Naming, Vabiable Assignment, Variable Operations, Formulas