Data Types

25 November 2024

14:42

Different types of values (Text, number etc)

Store these values in variables

Variables

26 November 2024

09:56

Ways of understanding data because it gives names to values

Below shows an example of variables (spent / donated / total amount)

A computer screen with white text

Description automatically generated

It is also possible to print out **multiple variables** in one single print function by using commas between the variables. The last line of the code below contains an example:

A white background with black text

Description automatically generated

*Output*: 20 10 2

Syntax Rules:

* Unable to put numbers infront of variables (e.g. 2items)
* Can add numbers in variables (e.g. it2ems) or behind (items2)
* Can use underscores but not spaces
* Amount of spaces unlimited, but recommended to add one space

Terminal

26 November 2024

10:30

Split Terminal using the book icon

A blue and black background with white text

Description automatically generated

This allows you to have a terminal for the py file, and a separate py terminal for quick coding

Example below shows 1 replicated in a terminal, and 2 being a separate terminal

A screenshot of a computer

Description automatically generated

To clear Terminal: (only command line, not python shell)

**cls**

Integers, Strings and Floats

26 November 2024

10:37

Below shows example of Integer (x), String (y), and Float (z)

A black background with white numbers and lines

Description automatically generated

\*note that you can use single quote for string

\*\*int will truncate decimals

You can use Type function for these variables to confirm:



Output:



List Types

26 November 2024

10:49

With lists use square brackets

Variable = ["list","list2","list3"]

Lists can also contain lists

Variable = ["list","list2",["list11","list22","list33"]]

Lists can be used for ranges too

Variable = list(range(1,11))

print(Variable)

>>> 1,2,3,4,5,6,7,8,9,10

Data Type Attributes

26 November 2024

10:59

To show list of commands available to a function, try:

dir(list)

Dictionary Types

26 November 2024

11:33

Dictionary syntax is {}

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Description automatically generated

What makes a Programmer a Programmer?

26 November 2024

12:44

Knowledge of:

* Syntax
* What Data Types to use (data structures)
* Algorithm

Tuples

26 November 2024

12:45

Like lists but with () not []

Cannot mutate (cannot add using .append / .remove etc.)