**Python** **Data** **Types**

* **Built-in Data Types**
* **Getting the Data Type**
* **Setting The Data Type**
* **Setting The Specific Data Type**
* In programming, the data type is an important concept.
* Variables can store data of different types, and different types can do different things.
* Python has the following data types built-in by default, in these categories:

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| Text Type: | str |
| Numeric Types: | int, float, complex |
| Sequence Types: | list, tuple, range |
| Mapping Type: | dict |
| Set Types: | set, frozenset |
| Boolean Type: | bool |
| Binary Types: | bytes, bytearray, memoryview |
| None Type: | NoneType |

* You can get the data type of any object by using the type() function:
* In Python, the data type is set when you assign a value to a variable:

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| |  |  | | --- | --- | | Example | Data Type | | x = "Hello World" | str | | x = 20 | int | | x = 20.5 | float | | x = 1j | complex | | x = ["apple", "banana", "cherry"] | list | | x = ("apple", "banana", "cherry") | tuple | | x = range(6) | range | | x = {"name" : "John", "age" : 36} | dict | | x = {"apple", "banana", "cherry"} | set | | x = frozenset({"apple", "banana", "cherry"}) | frozenset | | x = True | bool | | x = b"Hello" | bytes | | x = bytearray(5) | bytearray | | x = memoryview(bytes(5)) | memoryview | | x = None | NoneType | |

* If you want to specify the data type, you can use the following constructor functions:

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| |  |  | | --- | --- | | Example | Data Type | | x = str("Hello World") | str | | x = int(20) | int | | x = float(20.5) | float | | x = complex(1j) | complex | | x = list(("apple", "banana", "cherry")) | list | | x = tuple(("apple", "banana", "cherry")) | tuple | |  |  | | x = range(6) | range | | x = dict(name="John", age=36) | dict | | x = set(("apple", "banana", "cherry")) | set | | x = frozenset(("apple", "banana", "cherry")) | Frozen set | | x = bool(5) | bool | | x = bytes(5) | bytes | | x = bytearray(5) | bytearray | | x = memoryview(bytes(5)) | memoryview | |