Python Data Types

Built-in Data Types

In programming, 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:

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`

Getting the Data Type

Example

Print the data type of the variable x:

```python
x = 5
print(type(x))
```

Try it Yourself »

Setting the Data Type

In Python, the data type is set when you assign a value to a variable:

Example	Data Type	Try it
x = "Hello World"	str	Try it »
x = 20	int	Try it »
x = 20.5	float	Try it »
x = 1j	complex	Try it »
x = ["apple", "banana", "cherry"]	list	Try it »
x = ("apple", "banana", "cherry")	tuple	Try it »
x = range(6)	range	Try it »
x = {"name" : "John", "age" : 36}	dict	Try it »
x = {"apple", "banana", "cherry"}	set	Try it »
x = frozenset({"apple", "banana", "cherry"})	frozenset	Try it »
x = True	bool	Try it »
x = b"Hello"	bytes	Try it »

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```
x = memoryview(bytes(5))
```
memoryview　　Try it »

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Setting the Specific Data Type

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

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

Test Yourself With Exercises

Exercise:

The following code example would print the data type of x, what data type would that be?

```
x = 5
print(type(x))
```

Submit Answer »

Start the Exercise

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