Introduction to Programming in Python

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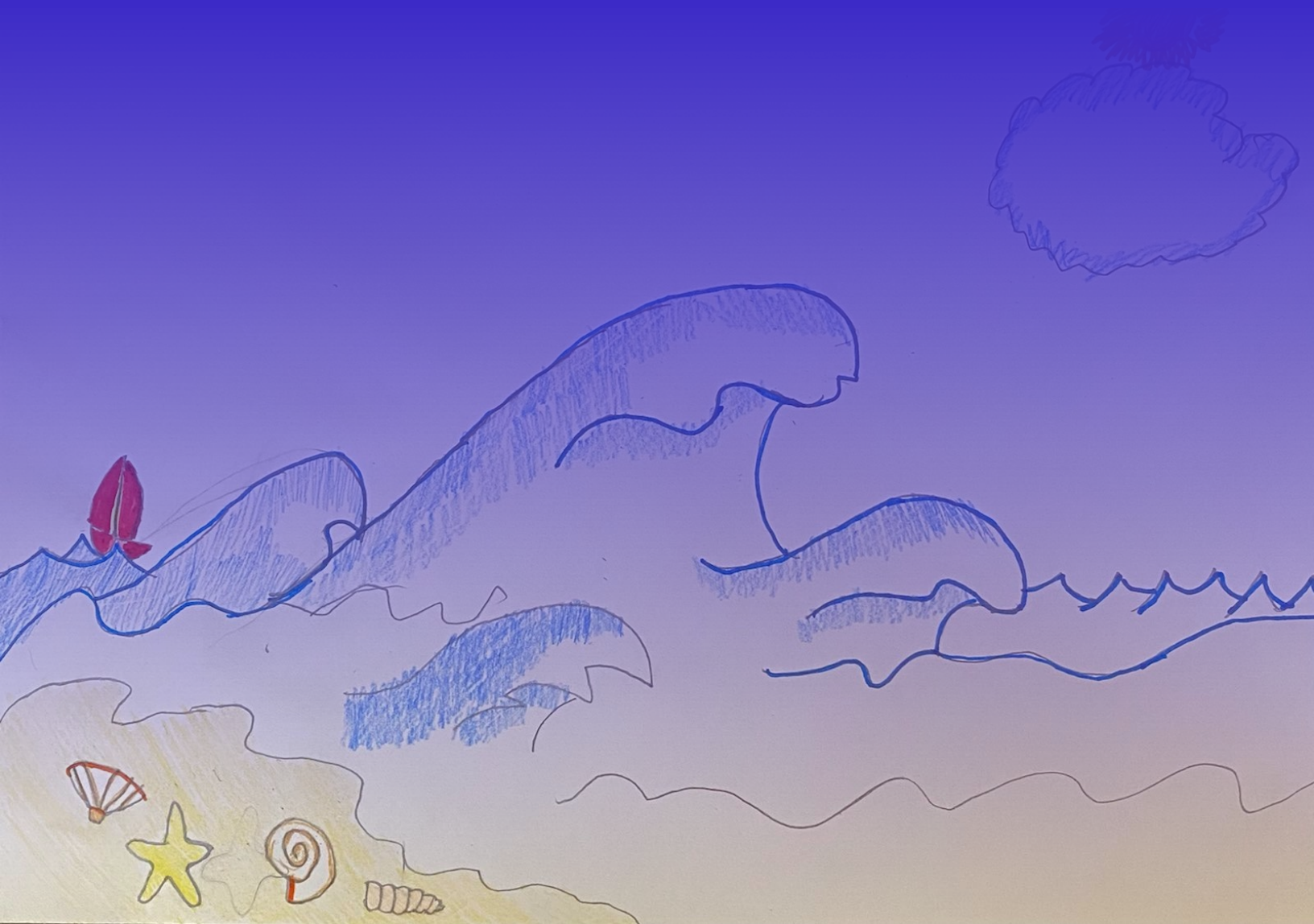
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1 Data Types

We have different kinds of built-in *things* in Python. These *things* are called data types.
Here is their table:

Data Type	Category	Examples
bool	Boolean	False, True
int	Integers	1, 2, 3, -1, -2, -3, 0
float	Floating point numbers	0.5, 1.5, 2.5, -0.5, -1.5, -2.5
complex	Complex numbers	$1 + i$, $2 + 2i$, $-3 + 5i$
str	Text sequence type	"a", "abc", "Hello, world!"
list	Sequence type	[], [0], [1, 2, 3], ["ab", "bc", "cd"]
tuple	Sequence type	(), (0), (1, 2, 3), ("ab", "bc", "cd")
range	Sequence type	range(10), range(1, 10), range(3, 8, 2)
set	Set type	{}, {0}, {1, 2, 3}, {"ab", "bc", "cd"}
frozenset	Set type	frozenset({}), frozenset({0}), frozenset({1, 2, 3})
dict	Mapping type	{}, {0: 1}, {2: 3, 4: 5}, {"a": 0, "b": 1, "c": 2}

Table 1: Built-in Data Types

1.1 bool

This is great.

2   The `print` Function

Just like in math, we have functions in Python as well. While we will cover Python functions in a greater detail in later chapters, the `print` function is so useful that we will start by learning how it works!

```
>>> print("Hello, world!")
Hello, world!
```

The way `print` works is that you write out these characters `p-r-i-n-t`, followed by the left paren (, followed by whatever we want to print, and finally the right paren).

```
>>> print(0)
0
>>> print(1)
1
>>> print(9)
9
>>> print(10)
10
```