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Chapter 2.2: Numeric Data types

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1. Integers `int`

Integers are those data types that contains either positive or negative numbers without any decimal points.

```
num1 = 5          # decimal number

# We can also assign binary, octal, or hexadecimal numbers

num2 = 0x4a       # hexadecimal number
num3 = 0b101      # binary number
num4 = 0o447      # Octal number

num5: int = -5    # optional type hinting
```

2. Floating Point Numbers `float`

Floating point numbers are those data types that can contain decimal values.

```
num1 = 5.5
num2 = -5.5
num3: float = 5.5  # optional type hinting
```

3. Complex data types `complex`

Unlike other programming languages, python comes with built in complex data types. we store the data in format:

`real + imaginary j`

```
comp1 = 5 + 4j
comp2 = -5j
comp3: complex = 8 - 5j    # optional type hinting
```

4. Boolean Data types `bool`

We can count Boolean data types as both numeric and logical data types since `True` represents `1` and `False` represents `0`. In python we have keywords assigned for Boolean data types.

```
engaged = True
married = False

alive: bool = True    # optional type hinting
```