Concept: Data Types and Type Casting

Python has several built-in data types such as integers (int), floating-point numbers (float), strings (str), and booleans (bool). Each data type represents a specific kind of data that determines the operations you can perform on it.

Type casting is converting one data type to another, such as changing a string to an integer. Use int(), float(), or str() for conversion.

Be cautious when casting—casting an invalid string to an integer will cause an error. Use exception handling when appropriate.

Example: converting user input (which is a string) into a number for calculation.

Python also supports complex numbers and the None type for representing null values.

```
x = 5
y = 2.5
z = '10'
print(type(x), type(y), type(z))

z = int(z)
print(x + z)

temp = 98.6
print('Temperature:', str(temp) + '°F')
```