

# Python Basics: Variables, Data Types and Operators

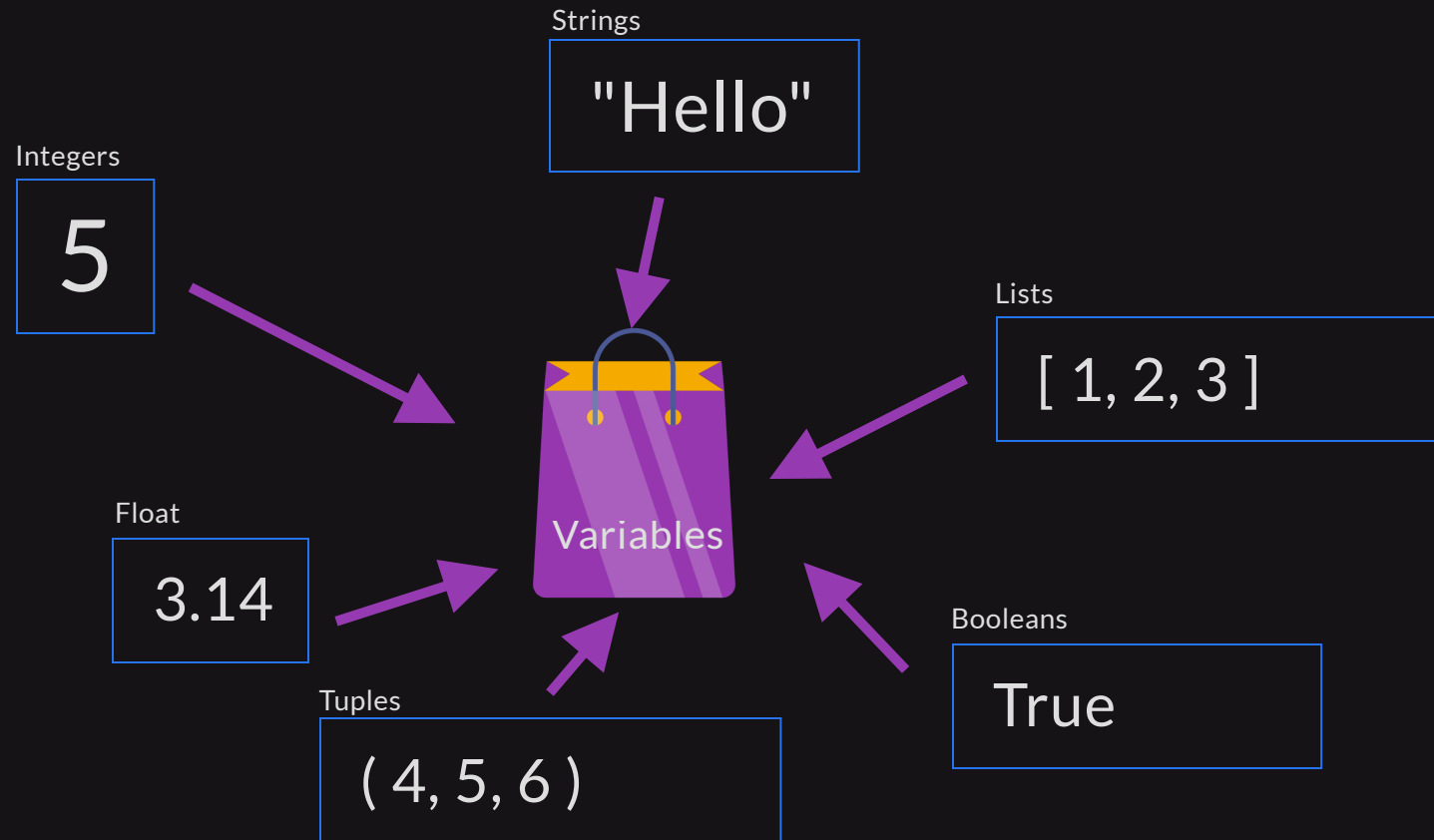
## Instructor

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# Variables and Data Types

# Understanding Variables and Data Types



In Python, variables are symbolic names that allow to share information (like numbers, strings, or other data types)

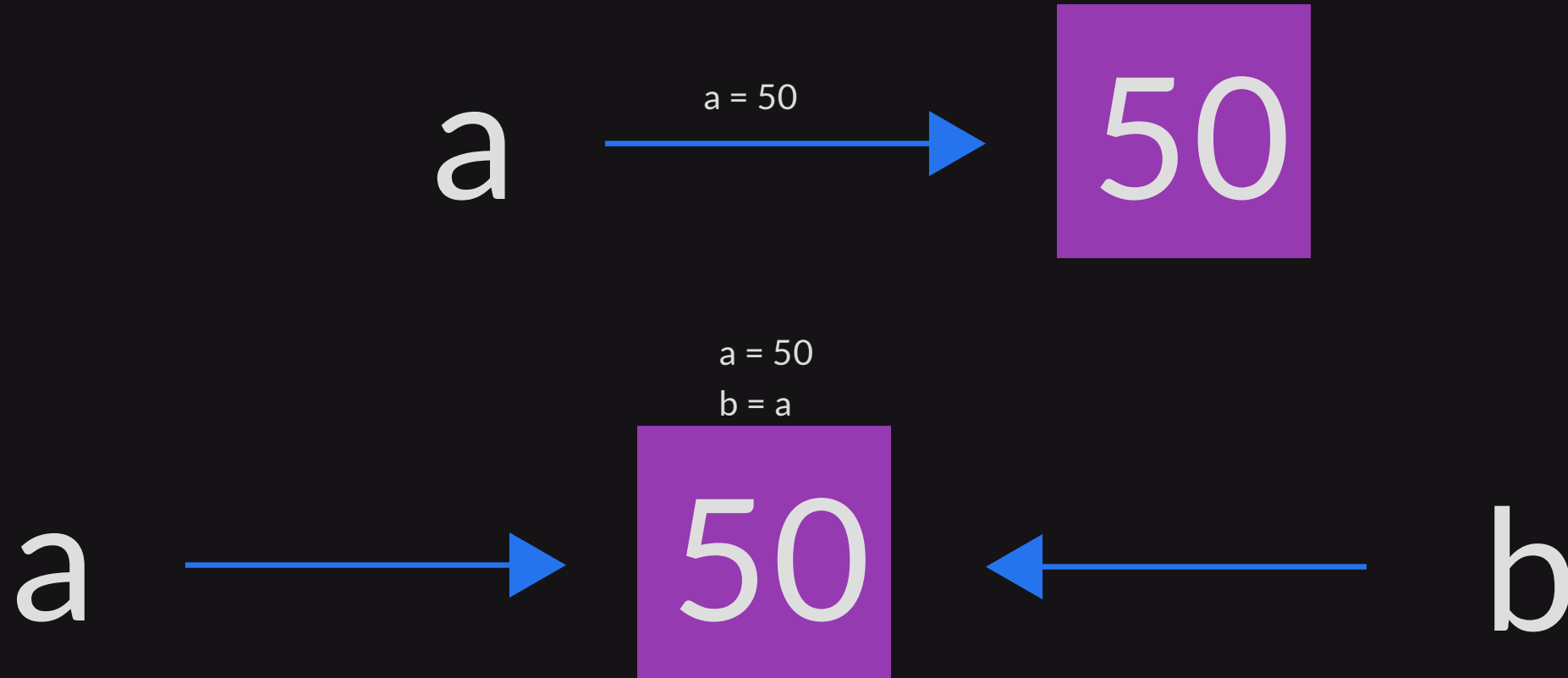
# Variables in Python

## Declaring Variable and Assigning Values

- Python allows us to define a variable when we need it, without requiring prior declaration in the program.
- In Python, variables do not need to be explicitly declared before they are used; they are created automatically when assigned a value.
- The assignment operator (=) is used to assign a value to a variable.

# Variables in Python

Declaring Variable and Assigning Values



# Variables in Python



## Python Core Data Types

1. Integer
2. Float
3. String
4. Boolean
5. None

## Python Containers/Collections

1. List
2. Tuple
3. Dictionary
4. Set
5. String

# Variables Naming Rules in Python

Variables are case-sensitive, meaning abc is different than ABC

Variable's name must start with an underscore character or a letter

Number cannot be used at the starting of the variable

Variables can be defined using the underscore and alpha-numeric characters

Reserved keywords should not be used to define the name of the variable

*Hands-on*

# Implementing Variables in Python

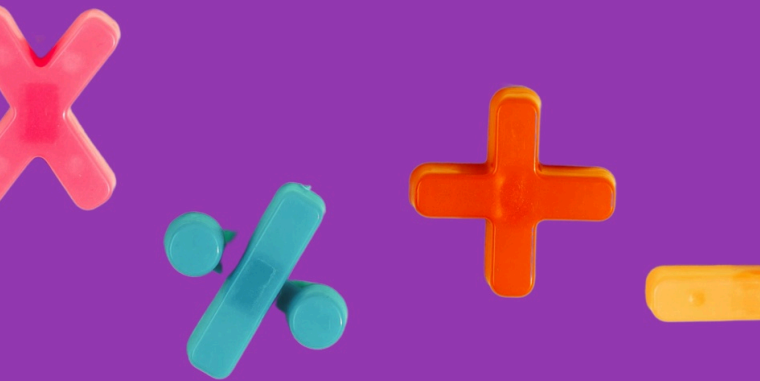


# Operators

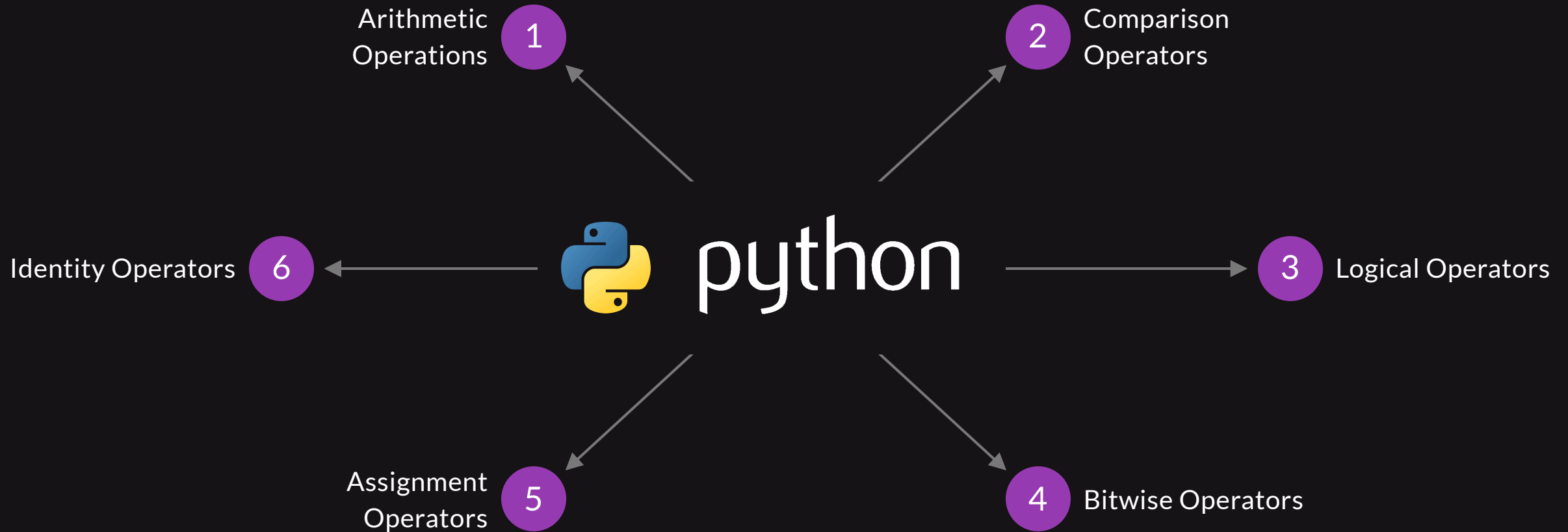
# Operators

In Python, **Operators** are used to perform operations on values and variables. These are standard symbols used for logical and arithmetic operations.

- **OPERATORS**: These are the special symbols. Eg- +, \*, /, etc.
- **OPERAND**: It is the value on which the operator is applied



# Types of Operators



*Hands on*

# Implementing Operators in Python

# Thank You

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