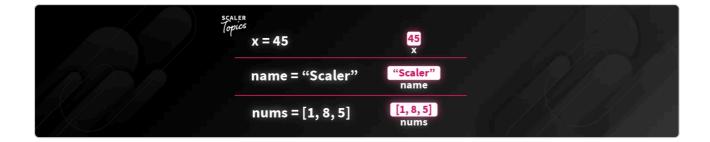
Variables in Python

Variables are used to store information that can be referenced and manipulated in a program. Python variables are dynamically typed, which means you don't need to declare their data type explicitly.



Example of Variable Declaration

```
name = "Alice"  # String
age = 30  # Integer
height = 5.7  # Float
is student = True  # Boolean
```



Rules for Naming Variables

- Variable names must begin with a letter or an underscore (_).
- The name can contain letters, numbers, and underscores.
- Variable names are case-sensitive (age and Age are different).
- You cannot use Python reserved words (like if, while, class).



Multiple Assignment

You can assign values to multiple variables in a single line:

```
x, y, z = 10, 20, 30 a = b = c = "Same"
```

Check Variable Type

```
print(type(name)) # <class 'str'>
print(type(age)) # <class 'int'>
```

Conclusion

Variables are a basic but essential concept in Python. Understanding how to declare and use them is key to writing effective programs.