

Common features in all programming languages :

Variables :

Containers which is used to store the value for further reference.
We commonly use three procedures to store a value.

1. Decalaration :

Creating a label or reference for the container.
Example: Var b;

2. Assignment :

The process of storing a value in the container or object.
Example: a=10;

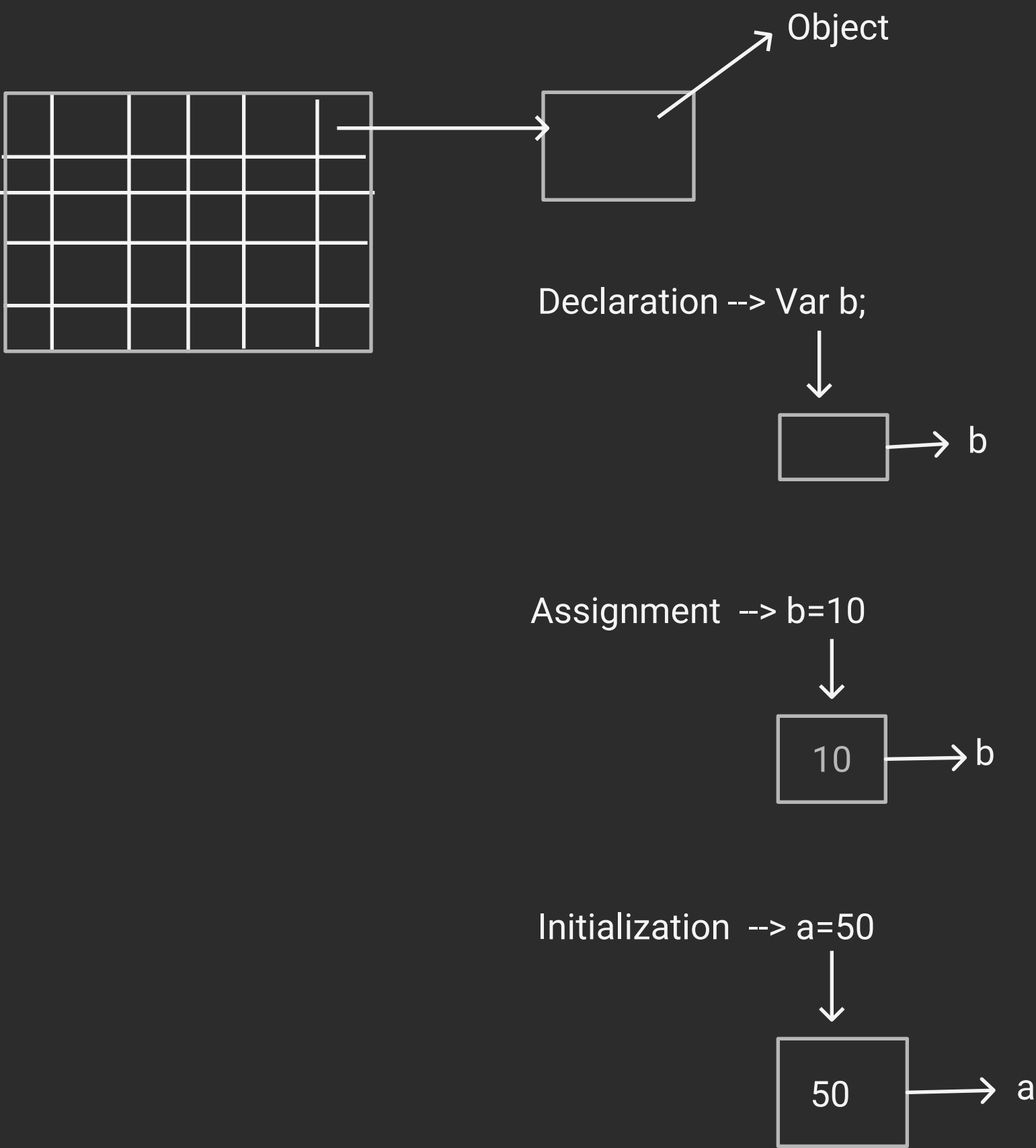
3. Initialization :

The process of assigning an initial value to a variable or data object when it is created.

In python we use initialization process.

Example: a=10;

→ In this process it creates both object and reference label.



→ In other languages we have to first declare the variable then memory will be created with the given variable name and then we have to assign the value to the variable name or reference.

→ But in python we can directly assign value to variable using initialization.

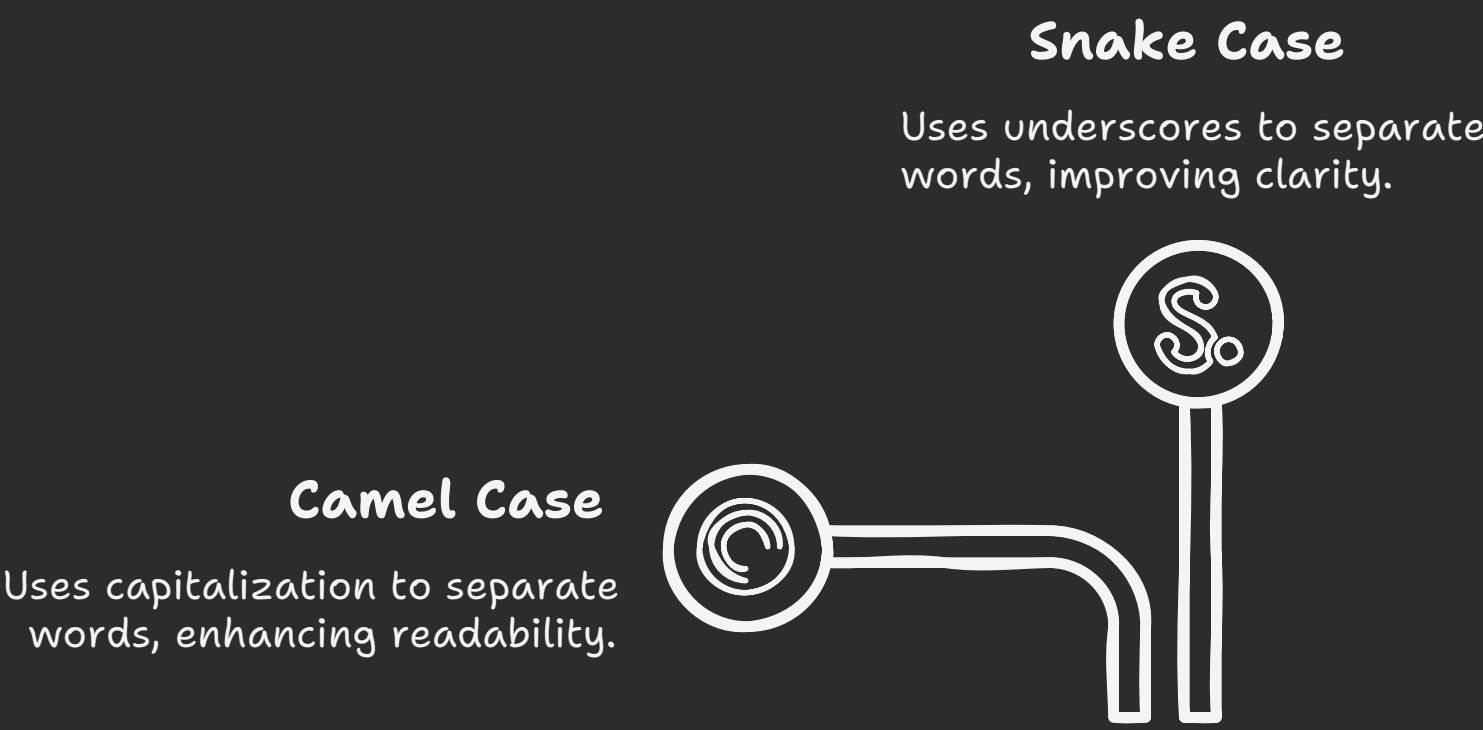
→ In python there are some rules to name a variable:

- 1) Variable name must start with a letter [a-z] [A-Z] or an underscore [_] .
- 2) They cannot start with a number.
- 3) Variable names can only contain alphanumeric characters and underscores. [A-Z , a-z , 0-9 , _].
- 4) Variable names are case-sensitive (age , Age and AGE are different variables).
- 5) Avoid using python keywords (eg: if, else , for etc,,,...).

Naming Conventions :

Camel Case: Uses Capitalization to seperate words, enhancing readability,
Example : ramCharan

Snake Case: Uses underscores to seperate word, improving clarity.
Example : ram charan



Multiple Assignments :

Python allows you to assign values to multiple variables in a single line.
a, b, c = 1, 2, 3 a=1, b=2, c=3

You can also assign the same value to multiple variables:
x = y = z = 10 x=10, y=10, z=10

Output Statements :

print () → In python it is a pre defined method used to print the value using variable name.
id () → In python it is a pre defined method used to know the id of the stored value.

Interning :

Interning apply only when the values are same and in between -5 to 256 → small integers
a=111
b=111