Scope

Scope

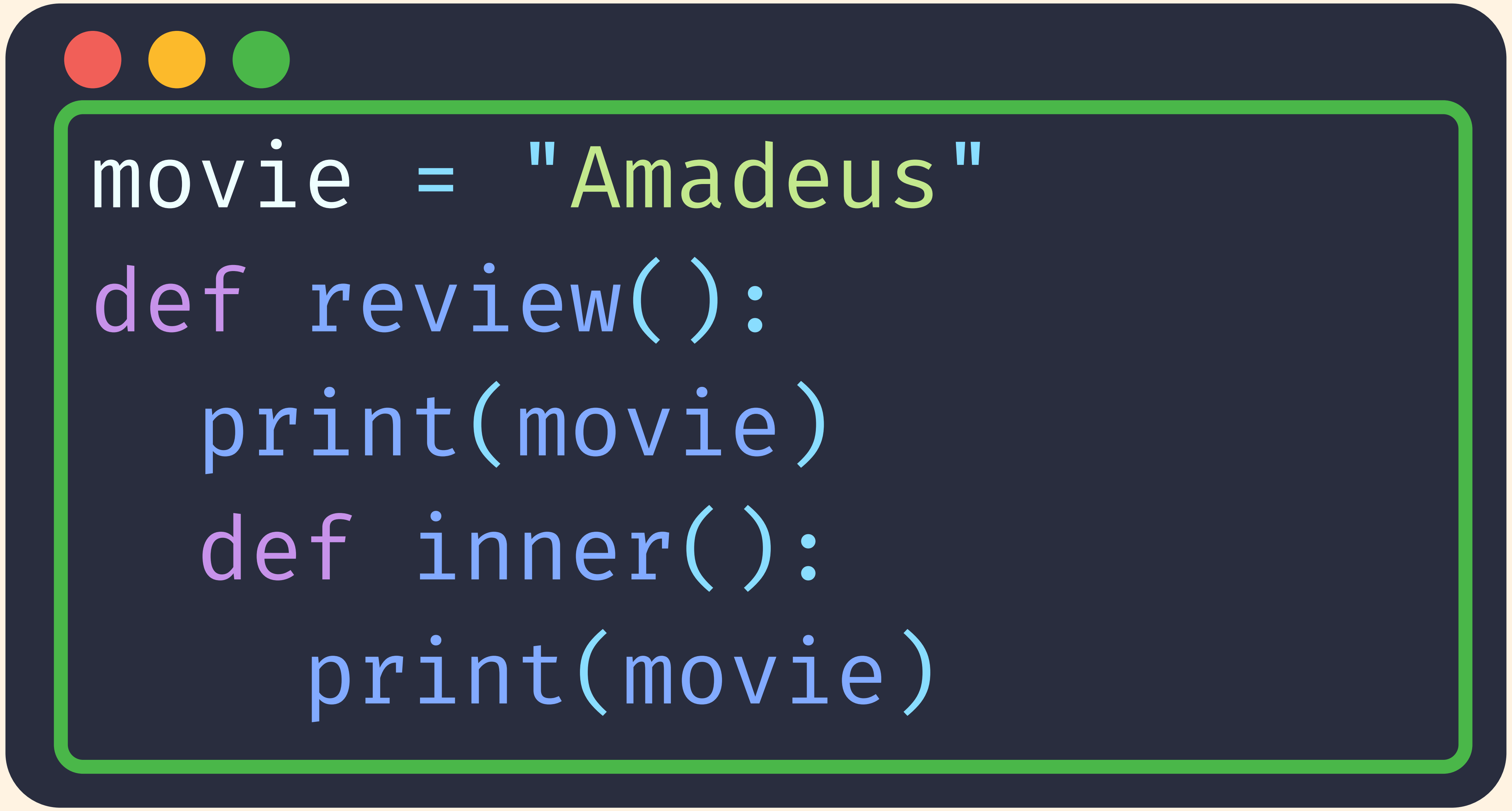
WHAT IS IT??

Every variable we work with in Python has a scope or **boundary where it can be used.** There are specific rules to how variables are scoped based on where they are initially defined.

LEGB

Lexical Enclosing Global Built-In

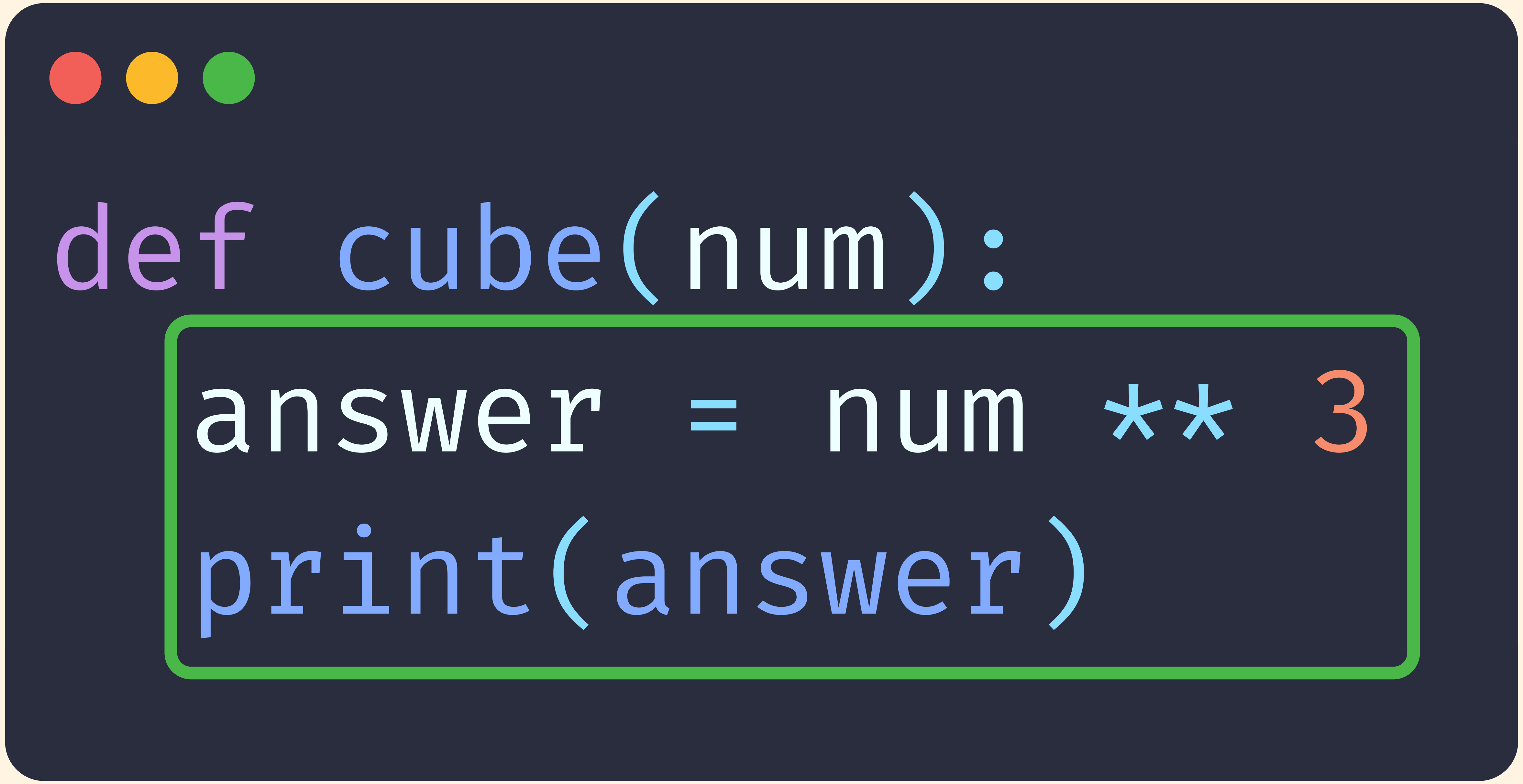
Global Scope



```python
movie = "Amadeus"
def review():
    print(movie)
    def inner():
        print(movie)
```

Variables declared outside of functions are in the global scope. All functions have access to them.

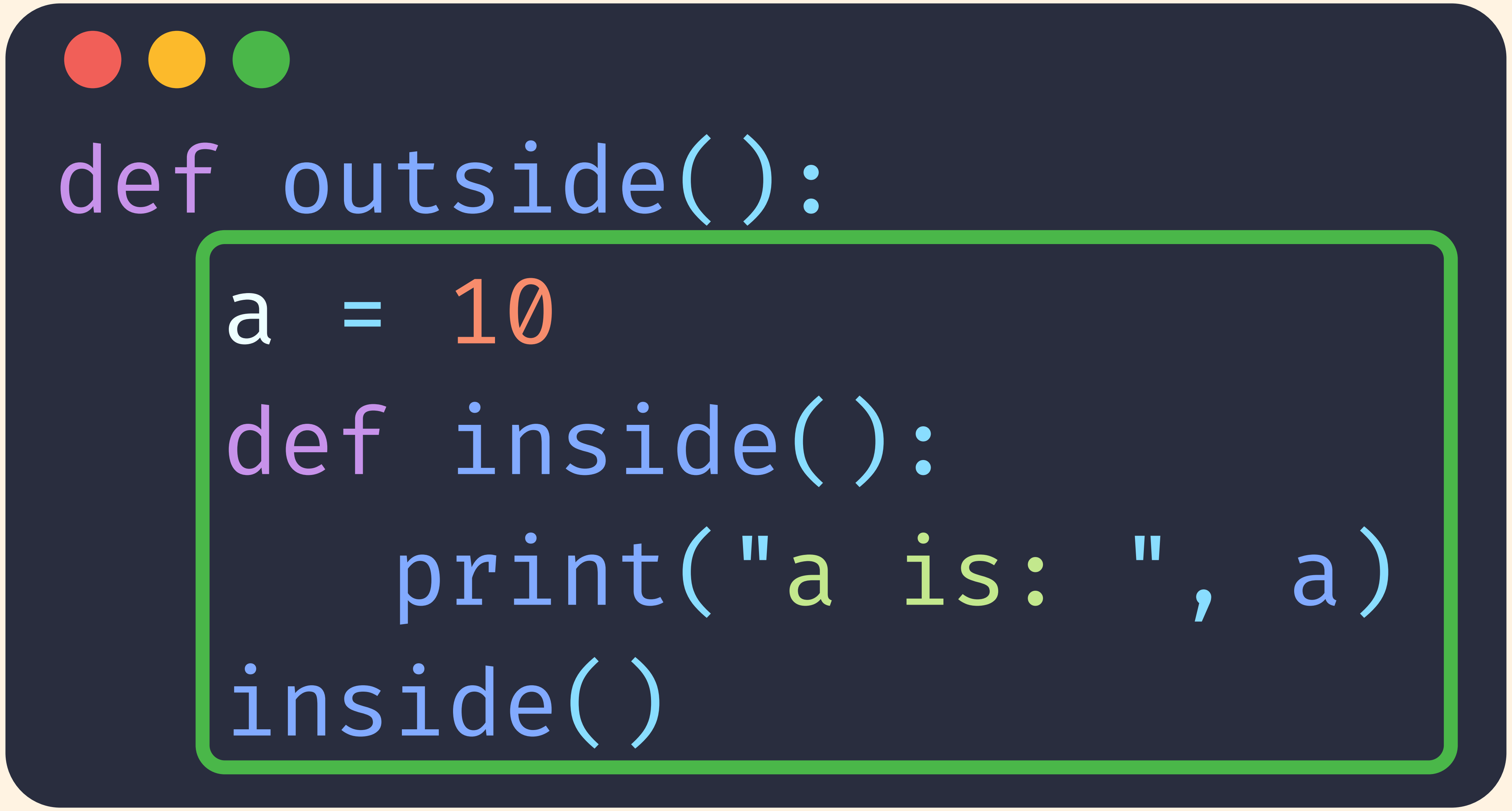
Local Scope



```python
def cube(num):
    answer = num ** 3
    print(answer)
```

Variables defined in a function are **scoped to that function.**
They are not available outside that function!

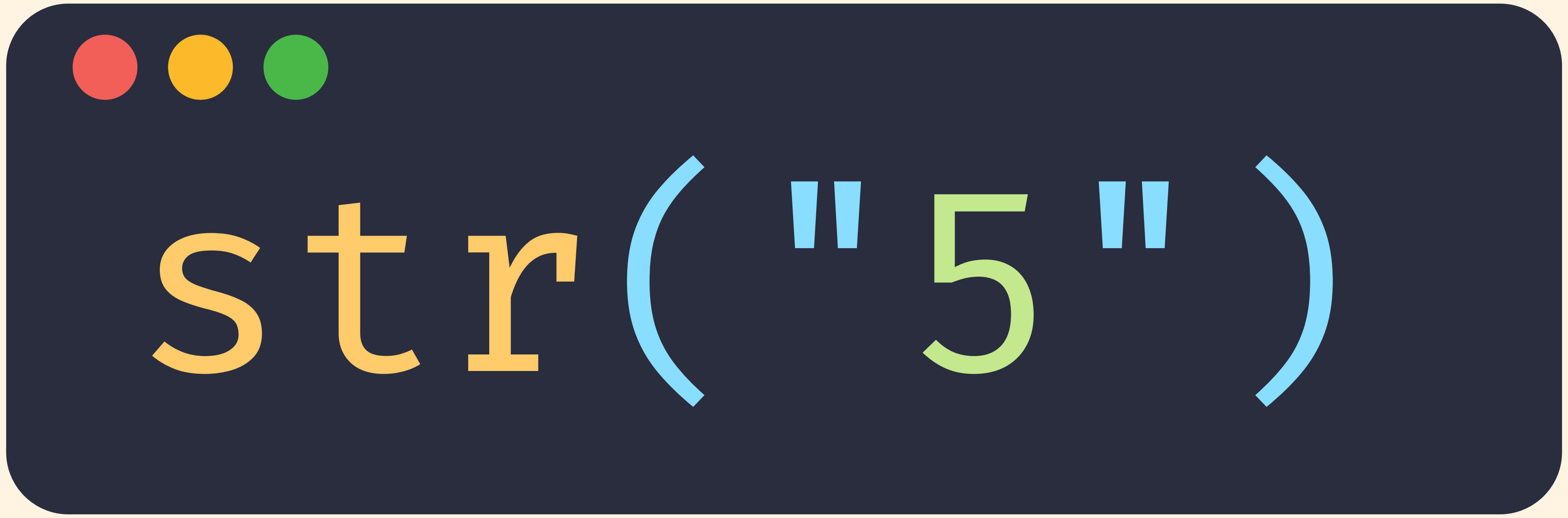
Enclosing Scope



```python
def outside():
    a = 10
    def inside():
        print("a is: ", a)
    inside()
```

Nested "inner" functions have access to variables declared in outer parent functions

Built-In Scope

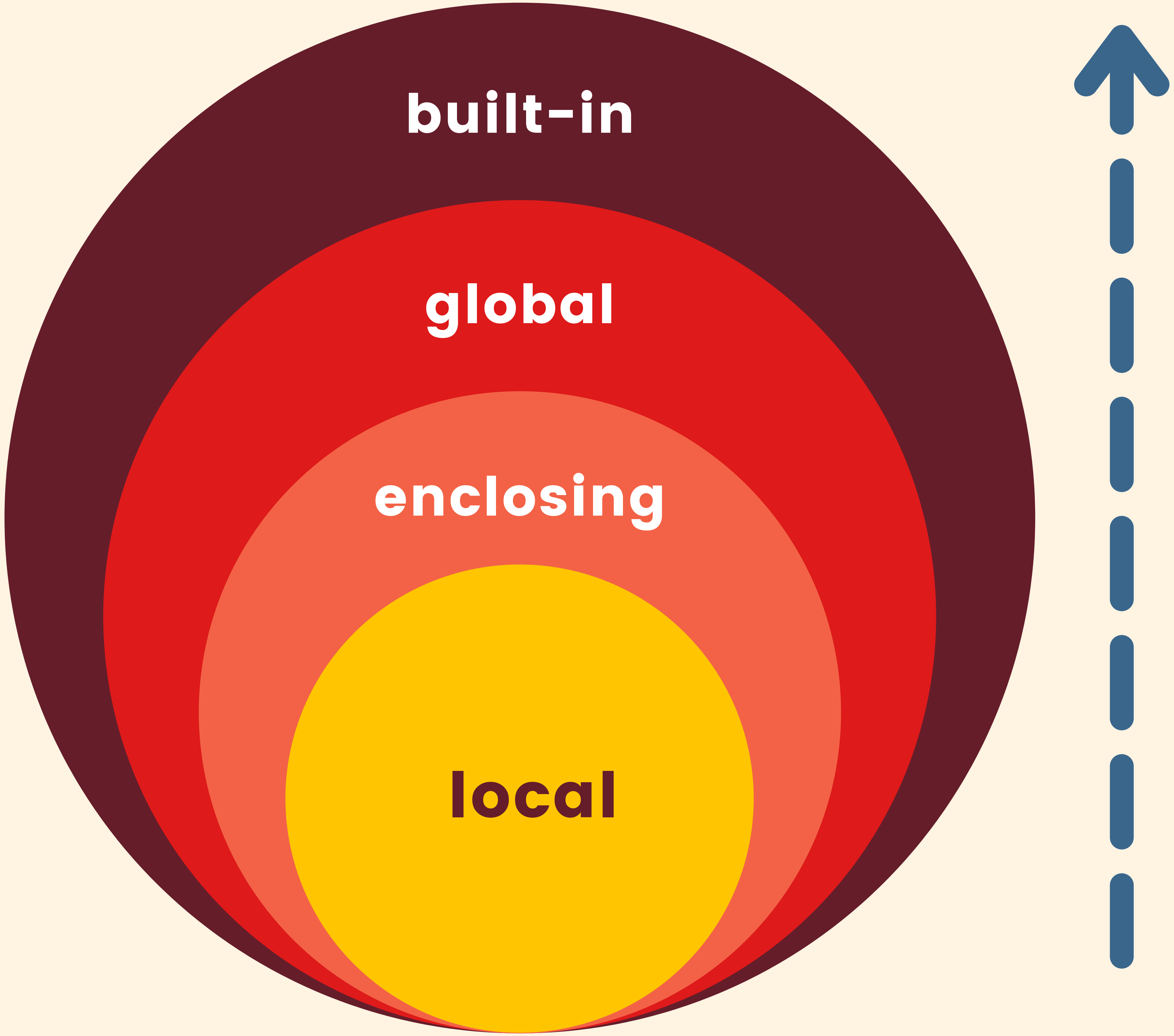


```
str("5")
```

All the built-in objects in Python are in the Built-In Scope. We have access to them anywhere!

L E G B

Lexical Enclosing Global Built-In


built-in
global
enclosing
local