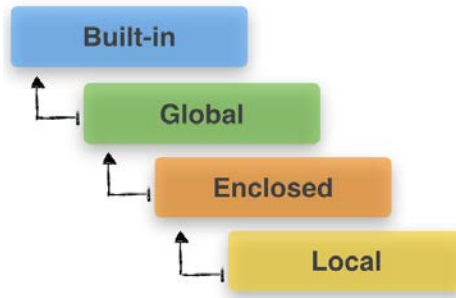


Python In-class Programming Assignment

Variable Scope

- Readings: *Liang* section 6.9 – 6.10

When considering the scope of variables in Python program. Think LEGB:



Graphic Source: Sebastian Raschka, *A Beginner's Guide To Python*¹

- Local: Variables declared locally (within) a function are only visible to that function. What does this print?

```
def f():  
    s = "Beat Army!"  
    print(s)
```

```
s = "Go Navy!"  
f()  
print(s)
```

- Enclosed: Variable scope within nested blocks of code is determined by starting at the inner-most block and working outward.
- Global: Variables declared (or imported) at the top-level of a file are visible by any code, including nested code, within that file.
- Builtin: Python names pre-assigned in built-in modules : open, range, SyntaxError, ...

There ways to override LEGB behaviors by using the `nonLocal` and `global` keywords in front of variables we declare, but that's outside the scope of SY201.

¹ https://sebastianraschka.com/Articles/2014_python_scope_and_namespaces.html