🎉 Master algorithms together on Binary Search! Create a room, invite your friends, and race to finish the problems.   ✕

Daily Coding Problem   Blog

Daily Coding Problem #91

Problem

This problem was asked by Dropbox.

What does the below code snippet print out? How can we fix the anonymous functions to behave as we'd expect?

```
functions = []
for i in range(10):
    functions.append(lambda : i)


for f in functions:
    print(f())
```

Solution

At a first glance, it seems like the snippet should print out from 0 to 9. But actually, it prints 9 10 times.

The problem is that the functions have closure and have access to the non-local variable `i`. We instead want the value of `i` when the functions are declared.

In order to solve this issue, we should capture the value `i` when the funcionts are declared. This would make `i` a local variable inside the anonymous functions.

```python
functions = []
for i in range(10):
    functions.append(lambda i=i: i)


for f in functions:
    print(f())
```