
CS 61A Structure and Interpretation of Computer Programs

Spring 2017

QUIZ 5

1. (5 points) LoopList

Implement a class `LoopList` that has a method `at_index`. If `at_index` is called with an index that is too large, the `LoopList` will loop around back to the beginning.

```
class LoopList:
    """
    >>> x = LoopList([3, 1, 4])
    >>> [x.at_index(i) for i in range(10)] # loops around!
    [3, 1, 4, 3, 1, 4, 3, 1, 4, 3]
    """
```

2. (5 points) Berkeley Landmark #158

Draw the environment diagram. (This is very hard!)

```
def camp(nile):
    def ding(ding):
        nonlocal nile
        def nile(ring):
            return ding
        return nile(ding(1914)) + nile(1917)

ring = camp(lambda nile: 100)
```