

Eager Summing List

```
class EagerSumList(list):
    def __init__(self, *args, **kw):
        super().__init__(*args, **kw)
        self._sum = sum(self)
    def __setitem__(self, position, value):
        self._sum -= self[position]
        super().__setitem__(position, value)
        self._sum += self[position]
    def sum(self):
        return self._sum
```

`__setitem__` is worst-case

- Subtract old value
- Add new value

Break Time

