

# Extending a List

- ◆ How about this? Will this work?

```
class BadSumList(list):  
    def __init__(self, *args, **kw):  
        super().__init__(*args, **kw)  
        self._sum = None  
    def sum(self):  
        if not self._sum:  
            self._sum = sum(self)  
        return self._sum
```



# Mutability Problem

```
>>> data = BadSumList([11, 12, 13, 14, 15])
>>> data.sum()
65
>>> data.append(999)
>>> data
[11, 12, 13, 14, 15, 999]
>>> data.sum()
65
```