

## Re: best cumulative sum

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*Source:* <http://coding.derkeiler.com/Archive/Python/comp.lang.python/2005-11/msg04228.html>

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- *From:* "David Isaac" <[aisaac0@xxxxxxxxxxxxx](mailto:aisaac0@xxxxxxxxxxxxx)>
  - *Date:* Mon, 28 Nov 2005 18:05:05 GMT
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"Peter Otten" <[\\_\\_\\_peter\\_\\_@xxxxxxx](mailto:___peter__@xxxxxxx)> wrote in message  
[news:dmcvtp\\$6s\\$02\\$1@xxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:dmcvtp$6s$02$1@xxxxxxxxxxxxxxxxxxxxxxxx)  
> sufficiently similar

I think I understand your points now.  
But I wanted to match these cases:

```
>>> import operator
>>> reduce(operator.add,[],42)
42
>>> reduce(operator.add,[1],42)
43
```

The idea is that the *i*-th yield of *i*-reduce shd be the result of reduce on seq[:*i*] with the given initializer.

That said, for the applications I first intended, yes it is sufficiently similar. For now, I'll stick with the version below.

Thanks,  
Alan

```
def ireduce(func, iterable, init=None):
    iterable = iter(iterable)
    if init is None:
        init = iterable.next()
    yield init
    else:
    try:
        init = func(init, iterable.next())
    yield init
    except StopIteration:
    yield init
    for item in iterable:
        init = func(init, item)
    yield init
```

- **References:**

- ◆ **best cumulative sum**
  - ◇ *From:* David Isaac
- ◆ **Re: best cumulative sum**
  - ◇ *From:* Micah Elliott
- ◆ **Re: best cumulative sum**
  - ◇ *From:* Erik Max Francis
- ◆ **Re: best cumulative sum**
  - ◇ *From:* bonono@xxxxxxxxxx
- ◆ **Re: best cumulative sum**
  - ◇ *From:* David Isaac
- ◆ **Re: best cumulative sum**
  - ◇ *From:* Colin J. Williams
- ◆ **Re: best cumulative sum**
  - ◇ *From:* David Isaac
- ◆ **Re: best cumulative sum**
  - ◇ *From:* Michael Spencer
- ◆ **Re: best cumulative sum**
  - ◇ *From:* bonono@xxxxxxxxxx
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