

- 优化前的代码 (01.flow-a.py)

```
1 from time import time
2 t = time()
3 lista = [1,2,3,4,5,6,7,8,9,10]
4 listb =[0.1,0.2,0.3,0.4,0.5,0.6,0.7,0.8,0.9,0.01]
5 for i in range (1000000):
6     for a in range(len(lista)):
7         for b in range(len(listb)):
8             x=lista[a]+listb[b]
9 print "total run time:"
10 print time()-t
```

```
1 [wuxiaomeng@wudeMacBook-Pro ~/Desktop/python/01.speedup ]
2 $python 01.flow-a.py
3 total run time:
4 21.2082309723
```

- 参照原文优化后 (01.flow-b.py)

```
1 from time import time
2 t = time()
3 lista = [1,2,3,4,5,6,7,8,9,10]
4 listb =[0.1,0.2,0.3,0.4,0.5,0.6,0.7,0.8,0.9,0.01]
5 len1=len(lista)
6 len2=len(listb)
7 for i in xrange (1000000):
8     for a in xrange(len1):
9         temp=lista[a]
10        for b in xrange(len2):
11            x=temp+listb[b]
12 print "total run time:"
```

```
1 [wuxiaomeng@wudeMacBook-Pro ~/Desktop/python/01.speedup ]
2 $python 01.flow-b.py
3 total run time:
4 17.1609051228
```

- 使用列表解析优化后 (01.flow-c.py)

```
1 from time import time
2 t = time()
3 lista = [1,2,3,4,5,6,7,8,9,10]
4 listb = [0.1,0.2,0.3,0.4,0.5,0.6,0.7,0.8,0.9,0.01]
5 len1=len(lista)
6 len2=len(listb)
7 for i in xrange (1000000):
8     x = [a+b for a in lista for b in listb]
9 print "total run time:"
```

```
1 [wuxiaomeng@wudeMacBook-Pro ~/Desktop/python/01.speedup ]
2 $python 01.flow-c.py
3 total run time:
4 12.3668849468
```