

[실습예제 6-2][도전!]

```
1 import numpy as np
2
3 ff = lambda x: x*np.sin(x)
4 fp = lambda x: np.sin(x) + x*np.cos(x)
5
6 oldx = 3.0
7 MaxIter = 1000
8 alpha = 0.25
9 for n in range(MaxIter):
10     newx = oldx - alpha*fp(oldx)
11     err = np.abs(newx-oldx)
12     oldx = newx
13     if err < 1.0e-6:
14         break
15
16 print('n={:4d}, xn={:.7f}, err={:.7f}'.format(n+1,oldx,err))
```

```
n= 14, xn=4.9131803, err=0.0000006
```
