MEMOIZATION

**import** time  
  
expensive\_func\_cache = {}  
  
**def** expensive\_func(num):  
 **if** num **in** expensive\_func\_cache:  
 **return** expensive\_func\_cache[num]  
 print(**"Computing {} ..."**.format(num))  
 time.sleep(1)  
 result = num \* num  
 expensive\_func\_cache[num] = result  
 **return** result  
  
  
print(expensive\_func(5))  
print(expensive\_func(10))  
print(expensive\_func(5))  
print(expensive\_func(10))  
*# Computing 5 ...  
# 25  
# Computing 10 ...  
# 100  
# 25  
# 100*print(expensive\_func\_cache)  
*# {5: 25, 10: 100}*