

運行環境: Windows cmd 裡用 conda 建的 Python 3.8 虛擬環境

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**main.py:**

```
class Fruit:
```

```
    def __init__(self, name, price):  
        self.name = name  
        self.price = price
```

```
class Cart:
```

```
    def __init__(self):  
        self.items = []
```

```
    def add(self, fruit, weight):
```

```
        if weight < 0:  
            raise ValueError("水果斤數需為大於等於 0 的整數")  
        self.items.append((fruit, weight))
```

```
    def total(self):
```

```
        return sum(weight * fruit.price for fruit, weight in self.items)
```

```
class StrawberryDiscount:
```

```
    def apply(self, fruit):
```

```
        if fruit.name == "strawberry":  
            fruit.price = fruit.price * 0.8      # 保留小數  
        return fruit
```

```
class Full100Minus10:
```

```
def apply(self, price):
    if price >= 100:
        price = price - 10
    return price
```

---

### **evaluation.py:**

```
from main import Fruit, Cart, StrawberryDiscount, Full100Minus10
```

```
# 控制折扣開關
```

```
strawberrydiscount = 1 #若 strawberrydiscount 為 1 則草莓限時打 8 折
full100minus10 = 1 #若 full100minus10 為 1 則購物滿 100 減 10 塊
```

```
# 測試案例 1：蘋果 1 斤、草莓 1 斤(打 8 折)、芒果 10 斤
```

```
apple = Fruit("apple", 8)
```

```
strawberry = Fruit("strawberry", 13)
```

```
mango = Fruit("mango", 20)
```

```
strawberry = StrawberryDiscount().apply(strawberry) #打 8 折
```

```
cart = Cart()
```

```
cart.add(apple, 1)
```

```
cart.add(strawberry, 1)
```

```
cart.add(mango, 10)
```

```
total = cart.total()
```

```
#total = Full100Minus10().apply(total) #滿 100 減 10
```

```
assert total == 8 + 10.4 + 200, f'期望 {218.4}，實際 {total}'
```

```
print(f'測試 1: 期望 218.4，實際 {total}')

# 測試案例 2：蘋果 6 斤、草莓 3 斤(打 8 折)、芒果 2 斤 + 滿 100 減 10

apple = Fruit("apple", 8)
strawberry = Fruit("strawberry", 13)
mango = Fruit("mango", 20)

strawberry = StrawberryDiscount().apply(strawberry) #打 8 折

cart = Cart()
cart.add(apple, 6)
cart.add(strawberry, 3)
cart.add(mango, 2)

total = cart.total()
total = Full100Minus10().apply(total) #滿 100 減 10

assert total == (6*8 + 3*10.4 + 2*20) - 10, f'期望 109.2，實際 {total}'
print(f'測試 2: 期望 109.2，實際 {total}')

print("所有測試通過 ✓")
```

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結果：

```
(market) D:\KIMI\ICBC>python evaluation.py
所有測試通過 ✓
```