

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 則草莓限时打 8 折
```

```
full100minus10 = 1 #若 full100minus10 為 1 則购物满 100 減 10 块
```

```
# 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 ✓
```