

```

# shopSmart.py
# -----
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# attribution to UC Berkeley, including a link to http://ai.berkeley.edu.
#
# Attribution Information: The Pacman AI projects were developed at UC Berkeley.
# The core projects and autograders were primarily created by John DeNero
# (denero@cs.berkeley.edu) and Dan Klein (klein@cs.berkeley.edu).
# Student side autograding was added by Brad Miller, Nick Hay, and
# Pieter Abbeel (pabbeel@cs.berkeley.edu).

"""
Here's the intended output of this script, once you fill it in:

Welcome to shop1 fruit shop
Welcome to shop2 fruit shop
For orders: [('apples', 1.0), ('oranges', 3.0)] best shop is shop1
For orders: [('apples', 3.0)] best shop is shop2
"""

from __future__ import print_function
import shop


def shopSmart(orderList, fruitShops):
    """
    orderList: List of (fruit, numPound) tuples
    fruitShops: List of FruitShops
    """
    cheapest_price = float('inf')
    cheapest_option = None
    for shop in fruitShops:
        price = shop.getPriceOfOrder(orderList)
        if price < cheapest_price:
            cheapest_price = price
            cheapest_option = shop
    return cheapest_option


if __name__ == '__main__':
    "This code runs when you invoke the script from the command line"
    orders = [('apples', 1.0), ('oranges', 3.0)]
    dir1 = {'apples': 2.0, 'oranges': 1.0}
    shop1 = shop.FruitShop('shop1', dir1)
    dir2 = {'apples': 1.0, 'oranges': 5.0}
    shop2 = shop.FruitShop('shop2', dir2)
    shops = [shop1, shop2]
    print("For orders ", orders, ", the best shop is", shopSmart(orders, shops).getName())
    orders = [('apples', 3.0)]
    print("For orders: ", orders, ", the best shop is", shopSmart(orders, shops).getName())

```