FANSHAWE
School of Applied
Science & Technology

SHOPPING HELPER

PURPOSE

In this exercise, user is prompted for the name, number, weight, and price of an item to be purchased. The program will then calculate the weight and price of the total purchase, and print out the results.

OBJECTIVES

After completing this exercise, you should be able to:

- Read data from the console
- Convert data from one type to another
- Perform simple operations on variables
- Print out variable values to the console

PROCEDURE

PREPARE SUBMISSION FILE

1. Create a copy of the submission template called COMP6060**INIT**Lab2.docx where **INIT** is replaced with your own initials. So if your name is John Smith, the document will be called COMP6060**JS**Lab2.docx

PREPARE PYTHON FILE

1. Create a Python file in the COMP-6060 workspace called COMP6060**INIT**Lab2.py where **INIT** is replaced with your own initials. So if your name is John Smith, the document will be called COMP6060**JS**Lab2.py
2. Print out the following to the console, replacing NAME with your name:
   ```
   Welcome to NAME's shopping helper!
   ```

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Prompt User For Item name

1. Prompt the user for the item name using the following sentence:
   `Please enter the item name to be purchased:`
2. Store the value in a variable called `itemName`

Prompt User For Item Quantity

1. Prompt the user for the item quantity using the following sentence:
   `Please enter the quantity of the item to be purchased:`
2. Store the value in a variable called `itemQuantityStr`
3. Convert `itemQuantityStr` to an **`int`** type, and store in a new variable called `itemQuantity`

Prompt User For Item Price

1. Prompt the user for the item price using the following sentence:
   `Please enter the price of a single item:`
2. Store the value in a variable called `itemPriceStr`
3. Convert `itemPriceStr` to a **`float`** type, and store in a new variable called `itemPrice`

Prompt User For Item Weight

1. Prompt the user for the average weight of a single item using the following sentence:
   `Please enter the average weight of a single item in lbs:`
2. Store the value in a variable called `itemAvgWeightStr`
3. Convert `itemAvgWeightStr` to a float type, and store in a new variable called `itemAvgWeight`

Calculate Total Price

1. Calculate the total price of the purchase by multiplying the item quantity by the item price
2. Store the resulting purchase price value in a variable called `totalPrice`

Calculate Total Weight

1. Calculate the total weight of the purchase by multiplying the item average weight by the item quantity
2. Store the total weight in a variable called `totalWeight`

PRINT RESULTS

1. Print the item details and total purchase price with the following structure:
   `Your quantity item(s) at $item_price each will cost $total_price`
2. Print the item weight and total weight with the following structure:
   `Your quantity item(s) at item_weight lbs each will weigh total_weight lbs`

SUBMISSION

1. Copy your code, and paste it in the submission file
2. Show results to Instructor

EXPECTED RESULTS

```
Welcome to Lynn's shopping helper!
Please enter the item name to be purchased: book
Please enter the quantity of the item to be purchased: 15
Please enter the price of a single item: 16.75
Please enter the average weight of a single item in lbs: 1.3
Your 15 book(s) at $16.75 each will cost $251.25
Your 15 book(s) at 1.3lbs each will weigh 19.5lbs
```

Student Name: _____ Instructor: _____

Date: _____