02.06 Module Two Project

Name:

Directions

Now that you have an understanding of using functions and operations with numerical and non-numerical data, it's time to show your instructor and yourself what you can do with them! You will use the software development life cycle (SDLC) to create a working program of your choice that will perform calculations with user input. Your program can include any Python skills and functions you have learned up to this point.

This assignment has five steps.

Step One: Planning & Analysis

Read the options carefully and choose **ONE** as the basis of your project.

Option 1 – Wish List

Use this table to organize your data:

Item	Price
GTX 1080 TI Graphics Card	$809.99
AMD Ryzen 5 2600X Processor	$221.19
GIGABYTE GA-AB350M Motherboard	$79.99

Step Two: Design

Insert your pseudocode here:

- **Input**
  -Six total inputs- Asking user item name first and then price and repeat 2 more times
- **Calculations**
  -Subtotal calculation by adding up the three price inputs
  -Tax calculation by taking subtotal calculation and multiplying by 6.5%
  -Total Calculation by taking subtotal, shipping, tax, and adding them to get the total
- **Output**
  -Show the name of all the items and their price in a list
  -Show the main prices separated from all the items
  -main items subtotal, shipping, tax, grand total

Step Three: Coding

Insert a copy of your code from the IDLE here

```
#Jack Sweeney 7/9/18
#Calculator for three items on your wish list with tax and shipping

def main():
#name
        fName = input("Whats your first name?")
        lName = input("Whats your last name?")
#Fist Item input
    firstItem = input("Whats the first item your buying?")
    firstItemPrice = float(input("Whats the price of the " + firstItem))

#Second Item input
    secondItem = input("Whats the second item your buying?")
    secondItemPrice = float(input("Whats the price of the " + secondItem))

#Third Item input
    thirdItem = input("Whats the third item your buying?")
    thirdItemPrice = float(input("Whats the price of the " + thirdItem))

#Naming
        intial = fName[0] + lName[0]
        fullName = fName + " " + lName

#Subtotal Calculation
    subTotal = firstItemPrice + secondItemPrice + thirdItemPrice
```

```
#Tax Calculation
    tax = .065 * subTotal

#Total Calculations
    shipping = 5.99
    total = tax + shipping + subTotal

#Output
    print intial + "'s Wish List"
    print "_____"
    print "Item                Cost"
    print "----------"
    print firstItem +  "       $" + str(firstItemPrice)
    print secondItem + "       $" + str(secondItemPrice)
    print thirdItem +  "       $" + str(thirdItemPrice)
    print "=========="
    print "     Subtotal       $" + str(subTotal)
        print "     Tax            $" + str(tax)
        print "     Shipping       $" + str(shipping)
        print "     Total          $" + str(total)
        print "_____"
        print "Good luck saving for your wish list have a great day " + fullName + "!"



main()
```

Step Four: Testing

Testing Question	Response
What bugs did you identify in your code?	When I tried using float input, it did not work. Another issue I had was relating back to the variable “firstitem” it said not defined.
How did you fix the bugs?	Added second parentheses at the end of the string I did not have, which caused the float, not work properly. I fixed this second issue by looking back and fixing the capitalization to “firstItem” which is what I actually defined.

Step Five: Maintenance

Maintenance Question	Response
What design and functionality improvements could you make to your program?	I would like my program on the output formatted so that the item list and price are correctly lined up evenly even if item names are longer or shorter. I would also like the ability for a user to pick how many items they can put in to calculate, for less or more than three.
How can you get feedback on ways to improve your program?	One way of improving the program would be by getting feedback by directly asking others who have used the program. Another way of getting helpful feedback would be by putting on the website where they got the program with a place to respond with feedback.
How can you expand your program into a new, better program in the future?	I can expand my program and make it better by giving it more capabilities and by improving current features. One way to improve one thing is add user defined shipping price instead of a set one.
What are potential bugs that users may possibly encounter if your program is expanded into a new program in the future?	If I expand my program to a user defined shipping price with a input and user knows the shipping is free and if they input nothing for shipping the program with throw an error. If I expanded to this id fix it by setting shipping to zero then asking for shipping so if they don’t input it will stay zero.