CS 8 – Introduction to Computer Science
HOMEWORK 6
Print this form and write your answers on it.

Submit this homework (hardcopy) to class. DUE DATE is 05/23/17.

Name: _____

Umail: _____@umail.ucsb.edu

Lab Time Circle one: 3 PM   4 PM   5 PM   6 PM

Based on Ch. 5 material. If you need more space to write your answers, feel free to use an extra blank page and attach it to this homework.

You have to complete a Python program and have it run successfully.

1. (5 pts) Go to **http://www.cs.ucsb.edu/~zmatni/cs8s17/hw6/** and download the 2 files you see there: a data file to be used as an input to your program called **prices.csv** and an **incomplete** Python program called **shoppinglist.py**.

2. (5 pts) Take a look at **prices.csv**. Note that it contains a long list of items you might find at a supermarket, along with their prices, and what aisle in the supermarket you'd find them. These 3 pieces of data per line are separated from each other with a comma (,) character. Think about how you might extract this data inside of a Python program.

3. (5 pts) Take a look at the incomplete program, **shoppinglist.py**. Note that it has missing code (I've even shown you *where* that is!). This program has to read the file **prices.csv** and pick out certain items from there. These certain items are encapsulated in a Python list called *itemlist*. These items inside of the list object *itemlist* have to be printed out on the screen, along with their prices, and their aisle number.

4. (25 pts) Modify the Python program, **shoppinglist.py**, so that, when it's finally run, it will print out on the screen all the items in *itemlist*, along with each of their prices, and what aisle they're found. The print out **should** look like this:

```
Item: apples     Price: $3.25     Aisle: 6
Item: beef       Price: $6.16     Aisle: 7
...etc...
```

Note the following:
(a) there are **tab characters** between each piece of text on each line
(b) there is a dollar sign **($)** before the price value

Finally, after that long print out of the list, you will also print out one more line showing the total price value as part of a sentence that looks like this:

```
        You will spend $61.39 on this shopping list
```
(yes, that's the actual total number you should see).

Submit a separate sheet of paper with a printout of the program that you staple to this one. You should test out your Python code and make sure it works before you submit this homework. You may utilize any of the methods we've discussed in class. HINT: look at the techniques we discussed and that I demonstrated in the Thursday, 5/11 class. Please know that there may be more than one way to get a correct answer for this assignment.