CS 105

Lab #10: Locally Grown

April 2-4, 2014

Make sure to fill this out about your team:

Team Letter (based on seating):

A B C D E F G H I J K L

(circle one)

CS 105, Section AY__

(fill out your section letter)

Your NetID:		**Your Name:**	
Second NetID:		**Second Name:**	
Third NetID:		**Third Name:**	
Fourth NetID:		**Fourth Name:**	

Your NetID is a series of up to 8 characters, like "jsmith2".

Overview

Similar to last week, you will find that we have prepared an **`.xlsx`** file for you to use in part of this lab. For this week, you will find that your Excel file contains multiple sheets within one Excel workbook. The file consists of three sheets:

- **Overview**, a sheet containing the key questions you will answer as part of this lab
- **All**, a sheet containing the names of various vendors that produce local food in the Champaign-Urbana region. In addition to the vendor name, a category and the city that the vendor is located at is also listed.
- **Farms**, a sheet containing the production of the farms listed on the **All** sheet.

The answers you will give for this week's lab will often access a different sheet within the Excel workbook. **Your answers for this lab must be in such a way that the formula works for where the question's answer appears in the Excel workbook.** This means several formulas will contain a sheet and cell reference, such as **`All!A2:A4`**.

As a reminder, the functions you have seen in lecture so far are:

- **Counting cells**: **`=COUNT()`**, **`=COUNTIF()`**, **`=COUNTIFS()`**, and **`=COUNTA()`**
- **Summing cell values**: **`=SUM()`**, **`=SUMIF()`**, and **`=SUMIFS()`**
- **Averaging cell values**: **`=AVERAGE()`**, **`=AVERAGEIF()`**, and **`=AVERAGEIFS()`**
- **Min/max values in an array**: **`=MAX()`** and **`=MIN()`**
- **Finding a value/index in an array**: **`=INDEX()`**, **`=MATCH()`**, and **`=VLOOKUP()`**

Additionally, you have seen the use of relative and absolute cell locations, by using the **`$`** symbol to "lock" a specific row or column from being copied or pasted.

As you did last week, **you will turn in this lab sheet for this week and the TA will grade only one submitted sheet per group**. You should work on the spreadsheet that you have downloaded and answer that appear on the back of this paper with your team.

The lab continues on the reverse side of this sheet of paper.

Lab Assignment

Q1: View the **Overview** sheet in the provided Excel workbook.

What formula did you use in ***C4****?* **=**_____

What was the answer when the city in ***C3*** *is Urbana?* _____

Q2: View the **Overview** sheet in the provided Excel workbook.

What formula did you use in ***C8****?* **=**_____

What was the answer when the city in ***C7*** *is Urbana?* _____

Q3: View the **Overview** sheet in the provided Excel workbook.

(a): *What formula did you use in* ***C11****?* **=**_____

(b): *What formula did you use in* ***C12****?* **=**_____

*What is the name of the farm (****C12****)?* _____

Q4: View the **Overview** sheet in the provided Excel workbook.

(a): *What formula did you use in* ***C15****?* **=**_____

(b): *What formula did you use in* ***C16****?* **=**_____

(c): *What formula did you use in* ***C17****?* **=**_____

*Does the farm in question sell meat (****C17****)?* _____

Q5: Enter a formula into cell **I2** on the **Farms** sheet that uses the **VLOOKUP** function to find the city associated with the farm in each row *(the cities are located in the* ***All*** *sheet)*. This formula must be developed in such a way that the cell can be copied form **I2** and pasted in **I3:I25** and return the correct results. **If the copy and pasted cell yields incorrect results in I3:I25, your formula is incorrect.**

What formula did you use in ***I2****?*

=_____