

Please work the following problems. They are due by 11:59 pm, Sunday, June 5.  
Remember to have a documentation sheet in each workbook.

## Excel

1. Create an Excel Workbook named "ExcelHomework3.xlsx" and using the table of distances between cities supplied (City Distance Table.xlsx) create Excel spreadsheets that answer the following questions. (Place each question answer in a separate worksheet and change the name of the sheet to Question 1a, Question 1b, etc. except for #A below)

A. Create a documentation sheet that has a sheet name of "Documentation", has "Created by:" in cell A6, your name (for me that would be Robert Cervený, for you it will be your name) in Cell B6, "ISM 4403/6405 Homework Assignment 3" merged and centered across A4 to B4, "Date Begun:" in Cell A7 and the date in Cell B7 so it does not change when the workbook is opened and "Date Completed:" in Cell A8 and the date in Cell B8 using the Today function.

B. Assign the range name Distance to the City Distance Table, StartCities to the left most column in the City Distance Table and StopCities to the top row of the City Distance Table.

C. Find the distance between each of these football teams home cities (Denver Broncos and Carolina Panthers) and San Francisco. Use the MATCH and INDEX functions to determine this. (Please note that the table does not have distance information for Charlotte, NC so use Atlanta, GA as the home city for our purposes. It also does not have Santa Clara so use San Francisco for the playoff city.)

D. Find the distance between Denver and San Francisco using the MATCH and VLOOKUP functions.

E. Find the distance between Atlanta and San Francisco using the MATCH and HLOOKUP functions.

F. Find the total distance traveled by both teams going from their home city to San Francisco and returning to their home city. (Add the distance traveled by each team together to come up with one number.)

G. Using Conditional Formatting, make the cell fill on the team that travels the shortest distance in F above have a light green fill.

H. Clearly label each number in the questions so the reader knows what they mean.

## VBA

Please work the following problem. It is due by 11:59 pm, Sunday, June 5.

2. Using the concepts discussed in Chapter 5 of the Albright (chapter purchased online) text create two separate VBA macros.

One, named SimpleAddition, asks a user for two positive integer numbers and then adds them together and displays the results in a MsgBox with the text "The Sum of the two numbers entered =" and the result. This macro will use Sub End Sub, Dim, Integer, InputBox, MsgBox and simple arithmetic.

3. For the second, use the file ExamScores.xlsx which has scores for an exam in cells A1 to A100. Write a macro named ExamAnalysis that uses Excel's functions (with WorksheetFunction) to do the following: Find the total of the scores (SUM), the average of the scores (AVERAGE), the standard deviation of the scores (STDEV), the maximum score (MAX) and the minimum score (MIN). You should have a MsgBox which displays your results.

This program uses Range("A1:A100"), MsgBox, as well as the functions mentioned in the problem.

(Hint, see section 5.7 in Chapter 5 of the Albright text for some background on this.)

Be sure to have a "run" buttons on the Excel worksheet that run each program when

clicked. Also, remember to save the workbooks which contain the programs as ".xlsm" files and have documentation sheets in each workbook.