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UPDATED FOR OFFICE 2016

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Computer Applications Concepts

Volume 3 - Integration - Office 2016

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We are a small company that listens! If you have any questions or if there is an area that you would like fully explored, let us hear from you. We hope you enjoy this product and stay in contact with us throughout your academic journey.
~ President Hexco Inc., Linda Tarrant

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Volume 3

Integration - Office 2016 (and some earlier versions)

INTRODUCTION

This book has been updated for Microsoft Office 2016 and focuses on the advanced uses of Microsoft Excel, Access, Word, and the interaction and integration of the three applications. We have assumed that the user has a basic knowledge of computers, applications, and operating system environments. This purports to expand your knowledge of the integration facilities for moving data, charts, graphs, reports, tables, etc. between the three applications.

Our intent is to explain thoroughly how to merge data into a document from a database, a spreadsheet file, or from a file created in Word. This should also give you guidelines if you decide to merge from another acceptable format, such as Microsoft Outlook and a .pst file. Emphasis is placed on using formatting switches to format data as it is merged. Beyond merging, the book purports to explain how to import tables from Excel to Access or send them from Access to Excel. It explains how to copy and paste charts, reports, or tables from one application to any other.

The last segment of the book is devoted to practical activities that utilize various capabilities covered in this volume. These fall short of "tests" since we felt that students need to concentrate on actual functions and facilities covered and not get bogged down in building and formatting specific report or document output.

The **Appendix** contains the answer keys for the exercises in the book, and a **Solutions CD** is available to purchase separately with the files used to create all the elements and exercises in this volume.

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I. **Mail Merge into Word Documents**
    A. **General Information – Data files built in Access, Excel, or even in Word can be used to provide data fields to be inserted into a Word document at specific locations.**
        1. Files that are merged into Word are typically Name and Address files, or files with records with demographic or statistical information. This can be a file of salespeople and their addresses, salary information, sales information, commission data, etc.
        2. The document can generate a new page for each record, a label for each record, a directory, or it can produce a list of data from each record sequentially on a page. The document that calls for merged data will have the same data for each record, except for the merged fields. This document will have all the formatting that will appear in each generated document.
        3. To merge, a user identifies the following components.
            a. A *Main Document* that can be a form, letter, labels, envelopes, or any other form of document.
            b. A *Data Source,* which can be an Access table or query, an Excel worksheet, a collection of data created in Word, which can be viewed as a table in Word, or data from an Address Book, such as Outlook or a Personal Address Book file.
        4. After the components are identified and built, the two can be merged together into the existing Main Document or into a New Document, the latter being preferred.
    B. **Merge Data into a Document Using Data Created in Word**
        1. Open a New Document in Word, choose Blank Document.
        2. Click **Alt** to view letter codes to select a tab, click **M** for the Mailings ribbon, and click **S** to Start a Mail Merge, and click **W** to select the **Mail Merge Wizard**.
        3. A Mail Merge window will appear to the right of your document as shown to the right.
        4. The radio button for "Letters" should be selected (if not, select it).
        5. Click on the "Next: Starting document" link at the bottom of the Mail Merge window.
        6. The radio button for "Use the current document" should be selected (if not, select it).
        7. Click on the "Next: Select recipients" link at the bottom of the Mail Merge window.
        8. Click the radio button to "Type a new list."
        9. Click **Create** under the "Type a new list" title, and the window shown on the next page will appear.

Mail Merge ▾ ✕

Select document type
What type of document are you working on?

◉ Letters
○ E-mail messages
○ Envelopes
○ Labels
○ Directory

Letters
Send letters to a group of people. You can personalize the letter that each person receives.

Click Next to continue.

Step 1 of 6

→ Next: Starting document
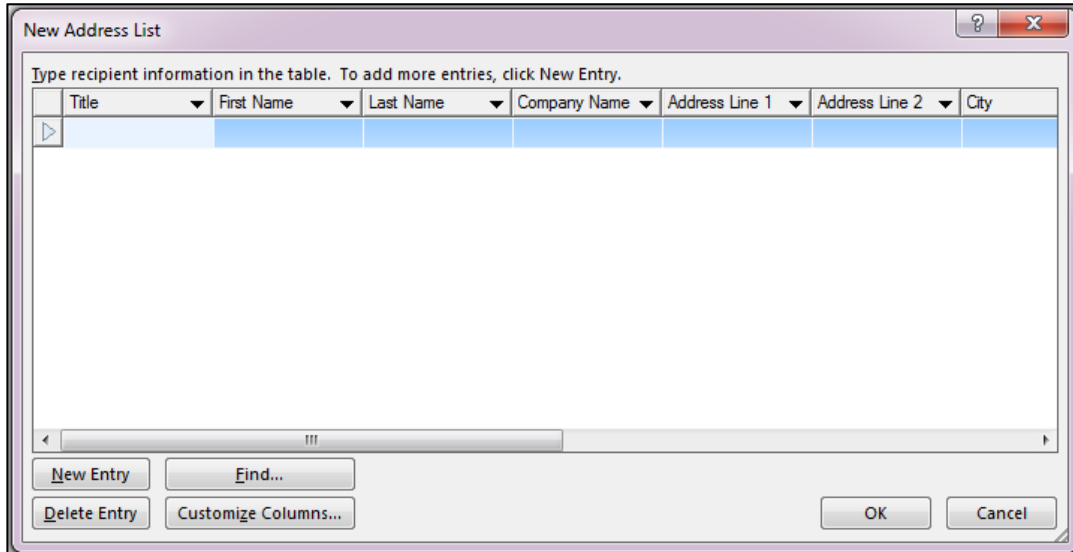
10. Click **Customize Columns**, and the window shown below will appear.
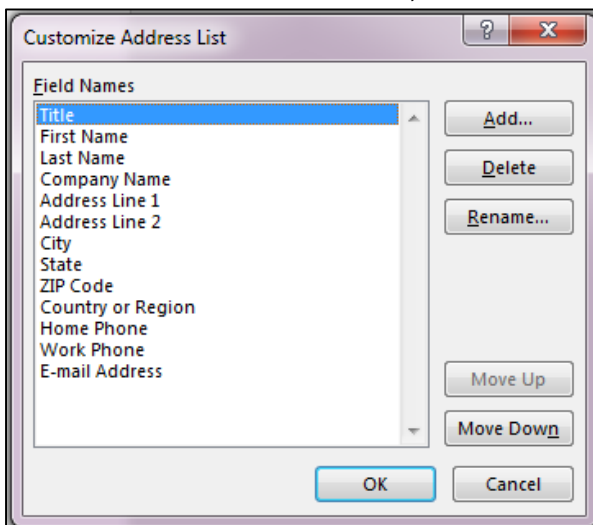
11. Make the following changes.
    a. Delete the following: Title, Company Name, Address Line 2, Country or Region, Home Phone, and E-mail Address.
    b. Rename ZIP Code to be **Zip5**.
    c. Click on Add to add the following fields.
        (1) Add **Zip4** after Zip5.
        (2) Add **Balance** after Work Phone.
12. The window should have fields in the following order shown below on the right; if not, you can move them to be in this order.
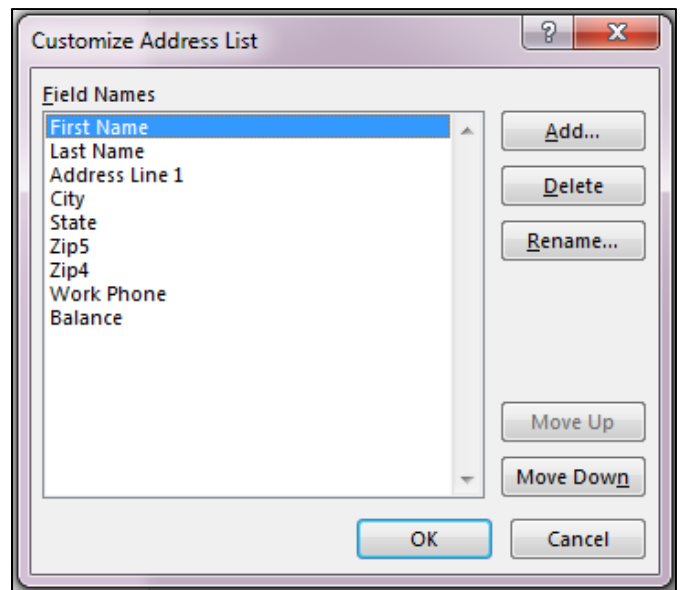
      a.   View Sheet 1 and add your own name to the list with your birthday, and drag Cell C7 and D7 into Cell C8 and D8, if this doesn't automatically happen.

      b.   Return to Access and open the **Excel2AccessTable** to see that your record was added here as well.

      c.   Access should now have the following appearance.

Excel2AccessTable			
Name	Birthday	Last Name	Group
Roland Coffey	8/5/1986	Coffey	80's
Dan Druffe	7/4/1980	Druffe	80's
Moses Lawne	3/31/1968	Lawne	60's
Phil McCavity	9/12/1975	McCavity	70's
Clara Nett	2/7/1987	Nett	80's
Topsy Sharp	1/15/1972	Sharp	70's
Mimi Selfe	2/7/1962	Selfe	60's

      d.   Save and close your table.

B.   **Create a Chart and Copy and Paste into an Access Report.**

    1.   In Access, **Excel2Access.accdb**, create a report by selecting **Report** from the Reports block of the Create ribbon (Alt, C, RN).

      a.   View the report in the Design View.

      b.   Change the Title to **Employees**.

      c.   Expand the Report Footer to be about three inches high using the ruler on the left.

      d.   Delete everything in the Page Footer and close it up.

    2.   Return to Excel, **Word2ExcelTable.xlsx**, and create a line chart.

      a.   Select Cells A1 thru B8.

      b.   Click Alt, N, N to create a Line Chart.

      c.   Click on the chart and click Ctrl-C to copy the chart.

    3.   Return to the report in Design View in Access.

      a.   Click on the bar that says Report Footer and click Ctrl-V to paste the chart into the Report Footer. (You may have to paste special.)
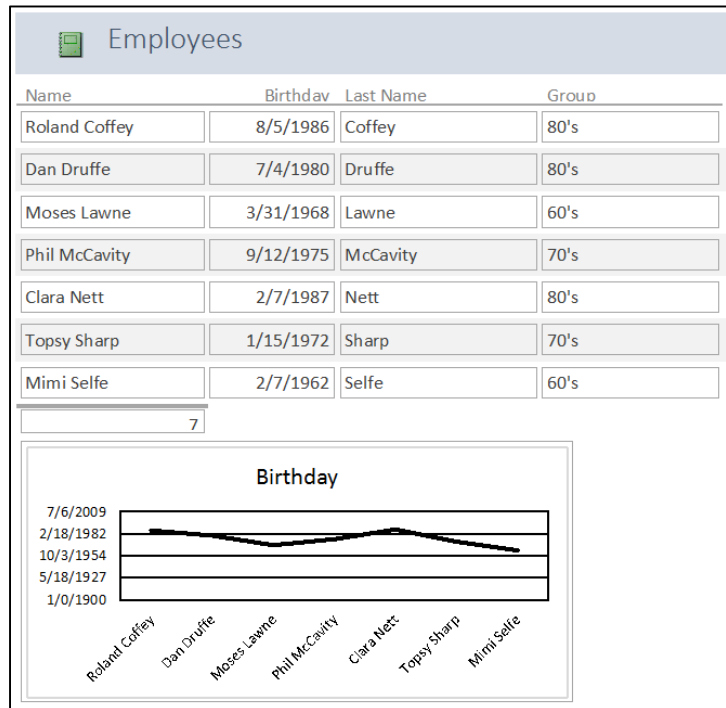
      b.   Move the chart to be below the Count.

      c.   View the report.

      d.   Your report should have the appearance shown to the right. (Note, some minor formatting changes may be different on your chart.)

Employees

Name	Birthday	Last Name	Group
Roland Coffey	8/5/1986	Coffey	80's
Dan Druffe	7/4/1980	Druffe	80's
Moses Lawne	3/31/1968	Lawne	60's
Phil McCavity	9/12/1975	McCavity	70's
Clara Nett	2/7/1987	Nett	80's
Topsy Sharp	1/15/1972	Sharp	70's
Mimi Selfe	2/7/1962	Selfe	60's

7

Birthday

7/6/2009
2/18/1982
10/3/1954
5/18/1927
1/0/1900

Roland Coffey   Dan Druffe   Moses Lawne   Phil McCavity   Clara Nett   Topsy Sharp   Mimi Selfe

      e.   Save your report as **Employees Report** and close.

D. **Exercise 4 – Merge to Trip Document.**
   1. Create a database named **Ex 4 – Trip Names** with a table named **Ex 4 – Names** without a Primary Key and with the following specifications. (Note, for Access 2010, use Text.)
   2. Enter the data below.

Ex 4 - Names		
Field Name	Data Type	
NAME	Short Text	50 characters
ADDRESS	Short Text	50 characters
CITY	Short Text	50 characters
STATE	Short Text	50 characters
ZIP	Short Text	50 characters

Ex 4 - Names

NAME	ADDRESS	CITY	STATE	ZIP
Huntley Davis	3717 Purdue	Dallas	TX	75205
Kim Roberts	606 South Street	Houston	TX	77027
Sue McKenzie	3801 Versailles	Dallas	TX	75227

   3. Select the Office Link to Merge it with Microsoft Office Word (**Word Merge**).
   4. Create a **Personal-Business Letter** in modified block style.
      a. Use a 1" top margin.
      b. Use the current date.
      c. The letter will be from Robbie Matthews whose address is 3713 Colgate, Dallas, Texas 75205.
      d. For addressee, insert field names referencing your database just created.
      e. Use the following salutation: Dear Fellow Traveler
      f. Use the following for the body of the document.

I have carefully calculated the details in time and fuel requirements for our proposed trip to Corpus Christi. I hope that you can make the trip in the first week of June with the rest of us.

Below is a spreadsheet showing the results of my study. My plan calls for Dallas as being the origination point.

(Import/Embed and center the spreadsheet created in Exercise 3 at this point with a blank line above and below.)

Call me with any questions or comments.

      g. Use the following complimentary close. Sincerely yours
      h. Save the document as a file named **Ex 4 – Trip Merge**.
   5. View the list of Mail Merge Recipients, and uncheck everyone except Sue McKenzie.
   6. Merge with the database file just created.
   7. Print the one-page letter with embedded spreadsheet to merged addressee.
   8. Compare your output to the Answer Key in the **Appendix B Part IV.A and IV.B**.
   9. Close all your files.

APPENDIX A - Glossary of Terms

absolute reference – is the indication of a column or row in a spreadsheet preceded by a dollar ($) sign so that the reference does not change as the reference to the cell is replicated; both row and column can be absolute or either one alone

alignment – refers to vertical and horizontal position of data or object position between left and right margins or within a column, cell, or other text area; alignment can be to the right, left, or centered within a cell, text area, line, or column

ampersand – the "and" sign (&) used in concatenation (joining) of string data

area chart – type of multiline graph in a spreadsheet which fills the area between lines to clearly illustrate differences

argument – parameter entered in a function and used in making calculations (*i.e.* in the function *=SUM(A1:B1)*, the range described by *A1:B1* is the argument for the function)

arithmetic operator – symbols used to indicate addition (+), subtraction (-), multiplication (*), division (/), and exponentiation (^) in formulas

ascending order – sequence of arrangement with the smallest number or letter closest to the front of the alphabet coming first. (*i.e.* 1 to 99… or A to Z)

ASCII – acronym for American Standard Code for Information Interchange; standard format in which files may be written to storage devices and used by most other applications; data output in this manner loses all its formatting information

attribute – characteristic ascribed to something, a property

bar chart – data graphically illustrated with a series of vertical bars

baseline – imaginary line on which a line of text is located; descenders of the letters, *g, j, p, q,* and *y* pass through the baseline

blank row – a blank line, empty line, or empty row in a spreadsheet or a document; also called an empty record in a database

blank line – an empty line, blank row, or empty row in a spreadsheet or document; also called an empty record in a database

block – selected set of items, such as words, cells, columns, etc.

border – lines drawn around the perimeter of a cell, field, range of cells, block of data, page, paragraph, drawing, or box that emphasizes the selection; each cell has four "borders", which may be visible or not, in a database and spreadsheet, left, right, top, and bottom, and these may be manipulated separately or in combination for format and size

break point – a specified change in a report when a Summary Total Line is inserted; triggered by a change in a particular field; group in a report is terminated at a break point

bullet – large dot, square or other symbol used to delineate or enumerate an important element, often within a list

calculated field – field having a mathematical expression as its source of data

category label – label describing what the x-axis of a spreadsheet chart represents; printed along the x-axis under the related bar or data point

B. Merged Document

3713 Colgate
Dallas, Texas 75205
Current Date

Sue McKenzie
3801 Versailles
Dallas, TX 75227

Dear Fellow Traveler:

I have carefully calculated the details in time and fuel requirements for our proposed trip to Corpus Christi. I hope that you can make the trip in the first week of June with the rest of us.

Below is a spreadsheet showing the results of my study. My plan calls for Dallas as being the origination point.

SUMMER TRIP PLAN						
	Dallas - Houston - Corpus - Victoria - Brownsville					
	Departure:	Date:	6/1/2018	Time:	8:30 AM	
	25	gal. gas tank	30	miles per gallon		
		Miles per		Travel	Arrival	Remaining
Route	Destination	Hour	Miles	Time	Time	Gallons of Gas
I 45	Houston	65	241	3:42	12:12 PM	17
Us 59	Victoria	55	124	2:15	2:27 PM	13
US 77	Corpus	63	92	1:27	3:55 PM	10
US 77	Brownsville	68	160	2:21	6:16 PM	4
			617	TOTAL MILES		

Call me with any questions or comments.

Sincerely yours,

Robbie Matthews