The **CONCATENATE** Function

One of Excel's text functions, is used to join two or more words or text strings together.

![Excel CONCATENATE function example](image)

The **syntax** for the CONCATENATE function is: `=CONCATENATE(text1, text2, ... text255)`

**Example: Using Excel's CONCATENATE Function**

**Note:** The concatenate function does not automatically leave a blank space between words or other data. To add spaces between the concatenated data we will add a space to lines Text 2 and Text 4 of the **dialog box** using the space bar on the keyboard.

1. Click on cell G2 - the location where the results of the function will be displayed.
2. Click on the **Formulas** tab.
3. Choose **Text Functions** from the ribbon to open the drop down list.
4. Click on **CONCATENATE** in the list to bring up the function's dialog box.
5. On line Text 1 of the dialog box, type in `C2` (no quotations) or click on cell E2 to enter that cell reference into the dialog box.
6. On line Text 2 of the dialog box, type in `D2` (no quotations) or click on cell E2 to enter that cell reference into the dialog box.
7. On line Text 3 of the dialog box, type in `E2` (no quotations) or click on cell E2 to enter that cell reference into the dialog box.
8. Click **OK**.
10. The complete function `=CONCATENATE(PSY13001)` appears in the formula bar above the worksheet.
Find Duplicate Data with **Conditional Formatting**

Finding duplicates - whether they be formulas, numbers, dates, or entire data records - is easily accomplished in Excel using conditional formatting.

What **conditional formatting** does is apply specific formatting options - such as a change in font or cell background color - when certain conditions are found in your data.

In the case of duplicate data, you can have all the duplicate information change to the same color so it is easy to find.

**Example: Find Duplicates with Conditional Formatting**

1. Enter the following data into cells A1 to A6:

   11, 12, 16, 12, 15, 12

2. Select column A on the spreadsheet.

3. Click on the **Home** tab.

4. Click on the **Conditional Formatting** icon on the ribbon to open the drop down menu.

5. Choose **Highlight Cell Rules > Duplicates Values...** to open the conditional formatting dialog box.

6. Select **Light Red Fill with Dark Red Text** from the list.

7. Click **OK** to accept the selections and close the dialog box.

8. Cells A2, A4, and A6 should be formatted with a light red background color and dark red text since all three contain duplicate data - the number 12.

The same steps can be followed to use conditional formatting to highlight duplicate data records in an Excel database, as well as duplicate formulas, dates, or other values in your data range.
Use **AutoFilter** to filter your data

Use AutoFilter to find values, show or hide values, in one or more columns of data. You can filter based on choices you make from a list, search to find the data that you want to see. When you filter data, entire rows are hidden if values in one or more columns don't meet the filtering criteria.

1. Select the data row you want to filter.
2. Click **Data > Filter**.

![AutoFilter](image)

1. Click the arrow in the column header and do one of the following:
2. Select specific values: Check **(Select All)** to clear all of the check boxes, and then select only the values you want to see.

![AutoFilter](image)

Search for values: In the **Search** box, type text or numbers you want to see.

Click **OK** to apply the filter
Comparing Spreadsheets

1. Start with two files.
   - Your submission [ACC 1st Edit Submission]
   - A new report off of Logi-131 (SOC list) [ACC Banner]
   ***Make sure both files have the same column headings.***

2. Color code the new Logi-131 data (Blue)

3. Cut and Paste below your submission data and SAVE AS new file name. [ACC Comparison File].

4. Highlight Header Row: Fill in color [Black]
   Freeze Header Row: View Tab→Freeze Panes→Freeze top row

5. Sort your information.

Sort Tip

6. Delete Rows you requested to be deleted
7. Add CRNS to rows you requested to be added
8. Delete Info on Column A
   Rename Column A [Merged]
   Filter Header Row: Data Tab→Filter

9. Double check Section Numbers Match
   Concatenate CRN, SUBJECT, NUMBER, SECT in cell A2 and copy formula down to the end.
   Highlight column A → Home Tab→Conditional Formatting→Highlight Cell Rules > Duplicates Values→OK
   Use Filter by Color to identify discrepancies (Highlight CRN)

10. Add CAMP, LOC, TYPE, METH to Concatenate formula
    Copy Formula down
    Use Filter by Color to identify discrepancies (Highlight CRN)
    Hide CAMP, LOC, TYPE, METH

11. Add INST MODE, SP APP, POT SESSION, LINK IDEN, LINK CONN to Concatenate formula
    Copy Formula down
    Use Filter by Color to identify discrepancies (Highlight CRN)
    Hide INST MODE, SP APP, POT SESSION, LINK IDEN, LINK CONN

12. Continue until all columns have been compared.
13. Unhide all columns and filter by CRNs with discrepancies.