

**STAT 4260 – Databases**  
**Spring 2018**  
**Assignment 8 – [50 points]**

**To save on paper since I am asking for screenshots, submit only an electronic file of your solution as well as the final excel workbook you made. Unless otherwise noted problems are work 5pts each.**

On the second Excel day, you learned how to import the A\_Midsummers\_Night\_Dream.txt file into excel and started to format the table into the desired format. For this assignment, you will be performing the following steps listed below and providing screenshots as well as a description of the commands you used to perform each action. Use Dreams.xlsx to perform all these tasks as Step 1 is already done for you as an example of the output that graders will be looking for.

1. Use a formula to remove stage directions, specifically Enter, Exit, Act, or Scene.

## SOLUTION

**In cell D2 > enter formula**

**=IF(EXACT(LEFT(C2,5),"Enter"),"",IF(EXACT(LEFT(C2,4),"Exit"),"",IF(EXACT(LEFT(C2,6),"Exeunt"),"",IF(EXACT(LEFT(C2,3),"ACT"),"",IF(EXACT(LEFT(C2,5),"SCENE"),"",C2)))))) > click cell D2, if it weren't already > double click the fill handle at the bottom right corner to repeat formula for all cells in column**

Character	LineNumber	Text	NewText
	1	Enter THE	
	2	THESEUS	THESEUS
	3	Now, fair Hippolyta, our nuptial hour	
	4	Draws on apace; four happy days bring in	
	5	Another moon: but, O, methinks, how slow	
	6	This old moon wanes! she lingers my desires,	
	7	Like to a step-dame or a dowager	
	8	Long withering out a young man revenue.	
	9	HIPPOLYTA, HIPPOLYTA	
	10	Four days will quickly steep themselves in night;	
	11	Four nights will quickly dream away the time;	
	12	And then the moon, like to a silver bow	
	13	New-bent in heaven, shall behold the night	
	14	Of our solemnities.	
	15	THESEUS	THESEUS
	16	Go, Philostrate,	
	17	Stir up the Athenian youth to merriments;	
	18	Awake the smart and nimble spirit of mirth;	

2. [3pts] Notice that if you click on cell D3 that the formula shows and not the actual resulting text. Format the table so that the actual text appears instead of the formula for each cell in column D.
3. [3pts] Now that you have removed stage directions from the table, you have blank lines in the NewText column. Remove these blank lines from the table and then put the table back in its original order.
4. Identify which character is speaking and copy that character's name into the Character column for all lines that they speak, e.g. THESEUS should be in column A for lines 2 through 8, then HIPPOLYTA, etc. Hint – Use an if statement that checks if Text and NewText are the same, returning the Text if true otherwise the previous cell in the Character column.
5. [3pts] Again, make it so that the actual text appears in the Character column and not the formula you used in Step 4, if you click on any of the cells in column A.

6. Now that you should have the Character column identifying each speaker, remove any lines that are simply character dialogue headers from the NewText column. So, for instance, if I see Theseus on a line by itself, then I know that is a character dialogue header.
7. **[3pts]** Format the table so that the actual text in Column D appears instead of the formula for each cell.
8. **[3pts]** Remove any blank lines from the NewText column and return the table in ascending line order.

[0pts] Delete Column D, as you will no longer need it.

9. Replace the proper case, in other words just the initial cap version of the name, with the all caps version of the name in the Text column. To do this, import characters.txt into a new sheet in the same workbook.
10. We need to be order to search the table for the names in proper case so change the names in this table to proper case using a formula and then edit the table so that the text and not formula are given for the end result.

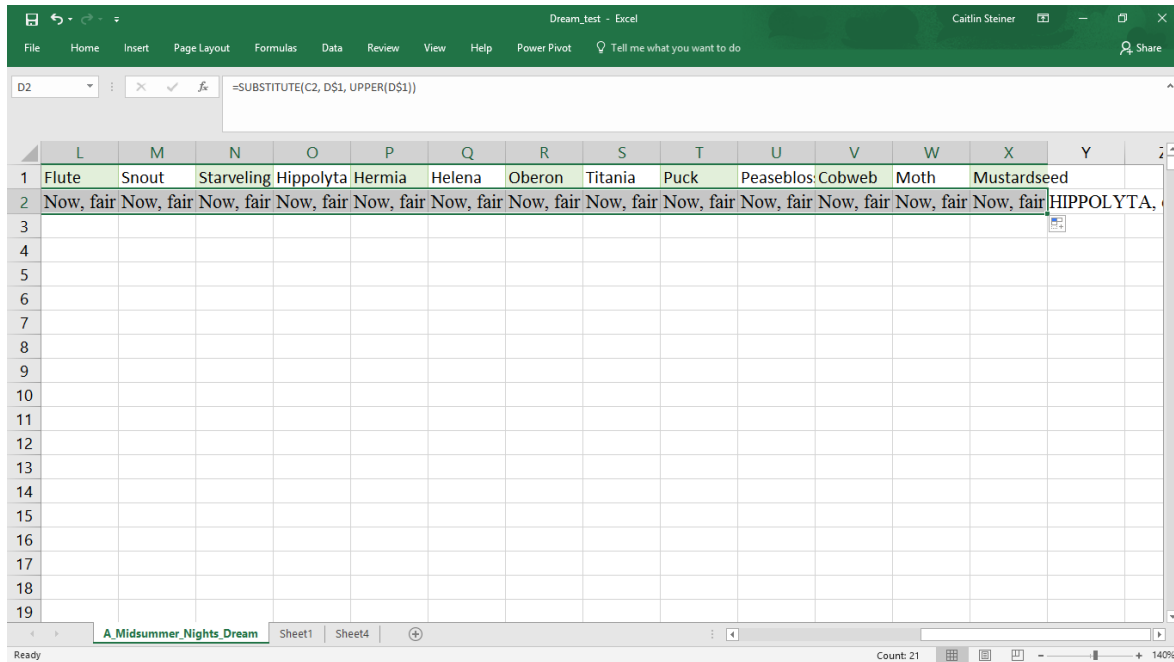
Now you want to paste these character names over into my A Midsummer Night's Dream worksheet. But rather than pasting them as a column, you will want to paste them as a row. And to do that, you need to transpose the values. So select all the proper names and copy them. Then click the A Midsummer Night's Dream worksheet tab. Then with cell D1 selected, please click it if it isn't already selected, press Alt, H for the home tab, V for the paste, and T for transpose. And there I get my character names, which should look like the following:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Character	LineNumber	Text	Theseus	Egeus	Lysander	Demetrius	Philostrate	Quince	Snug	Bottom	Flute	Snout	Starveling
2	THESEUS		3 Now, fair Hippolyta, our nuptial hour											
3	THESEUS		4 Draws on apace; four happy days bring in											
4	THESEUS		5 Another moon: but, O, methinks, how slow											
5	THESEUS		6 This old moon wanes! she lingers my desires,											
6	THESEUS		7 Like to a step-dame or a dowager											
7	THESEUS		8 Long withering out a young man revenue.											
8	HIPPOLYT,		10 Four days will quickly steep themselves in night;											
9	HIPPOLYT,		11 Four nights will quickly dream away the time;											
10	HIPPOLYT,		12 And then the moon, like to a silver bow											
11	HIPPOLYT,		13 New-bent in heaven, shall behold the night											
12	HIPPOLYT,		14 Of our solemnities.											
13	THESEUS		16 Go, Philostrate,											
14	THESEUS		17 Stir up the Athenian youth to merriments;											
15	THESEUS		18 Awake the pert and nimble spirit of mirth;											
16	THESEUS		19 Turn melancholy forth to funerals;											
17	THESEUS		20 The pale companion is not for our pomp.											
18	THESEUS		22 Hippolyta, I woo'd thee with my sword,											
19	THESEUS		23 And won thy love, doing thee injuries;											

11. Now create formulas that will compare the value and the dialogue lines, starting in row number two, with the character names in D1 through X1 and replace the Text with an uppercase version of a name instead of the proper name currently being used. If there's a match, so for example when we get to column H, we have Philostrate, in row 13, we should get this Philostrate here transposed into an uppercase rendering of the name. The reason you copied the names over in as a row instead of a column is so you won't have to use a very long and nested if statement when replacing names. Consider the following:
  - Use SUBSTITUTE function. What SUBSTITUTE does is it looks for text in a cell, and if it finds the exact string that you tell it to look for, then it will replace it with another string.
  - As all the names are in the first row, lock the formula to only grab the first row and switch columns for when you drag the formula to other cells, e.g. \$A\$1 locks a formula to just cell A1; A\$1 locks a formula to row 1 but different columns if dragged across; \$A1 locks a formula to column A but different rows if dragged down.

The idea here is once you enter a formula in to D2 correctly, if you drag it across all the way to column X, as Excel finds a name it should upper case it (even if there are more than one name in the line) as each column updates the previous columns output if done correctly. Thereby placing the final edited version in column X.

For example, a partial screenshot is the following



12. [3pts] In order to delete all unnecessary columns, you first need to replace the formula with the actual text in the workbook. Do that now and then delete column C through W and rename the column header Text.
13. [3pts] Lastly, renumber the lines so that the first line “Now, fair HIPPOLYTA...” is line 1, “Draws on...” is line 2, etc.
14. [4pts] Submit final workbook to collab. Should look like the following:

