Read in a csv (GroupMakerSample.csv)

• What happens when you enter in the wrong filename/file that does not exist:

Pass/Fail	Current Output	Expected Output	How to
			Replicate
Pass	Says file does not exist	Print error message – File does not exist or incorrect spelling	Hello.csv

- What happens when you leave out .csv?
- What happens when you try to read in another type of file (ex: .txt, .docx)

Pass/Fail	Current Output	Expected Output	How to
			Replicate
Pass Pass	Says to enter	Print error message	Hello.txt or
	proper csv	– Please enter a	Hello with no
		proper CSV	extension
		filename with the	
		.csv extension!	

• What happens when you enter in the correct filename:

Pass/Fail	Current Output	Expected Output	How to
			Replicate
Pass Pass	Prints Successfully	Prints Successfully	Any proper csv
	read in csv. Prints	read in csv. Prints	files.
	out the data in the	out the data in the	
	csv file	csv file	

NOTE: First Header in column 1 of file must be named "Name" and not "Names" or anything else!

-This is something we should try to fix.

Note: Before finalizing comment/Remove unneeded print statements used for testing. (Such as printing the header names after reading in the file.) (Also comment out the print statement to print out dataframe "totalDF" variable.

Things changed:

- -Added a print statement after it read in successfully.
- -Lowercased the N in [Y/N] to [Y/n] as mentioned during presentations in class.
- -Inconclusive Errors when testing (Not sure if only on Spyder and Excel issues)
- -Files being read in were being corrupted (not able to replicate) (For example files with five columns were being compiled into files with one single column with everything in it.) (Seems to be an Excel 2013 issue) https://stackoverflow.com/questions/17953679/how-to-correctly-display-csv-files-within-excel-2013
- -NOTE: The file works when it runs through one time but goes into one column after the first run.

(Fixed this by manually adding in commas to csv file where needed using a text editor)

-Must press run multiple times before being prompted to enter in a filename (Most likely issue on Spyder)

Read in a separate CSV file than (anything other than GroupMakerSample.csv):

• Does it read in a CSV with a different filename?

Pass/Fail	Output	Expected Output	How to
			Replicate
Pass Pass	Same as before.	Same	Group25.csv
	GroupMakerSample.csv		

• Can it properly read headers? (Spaces in headers)

Pass/Fail	Output	Expected Output	How to
			Replicate
<mark>Pass</mark>	Reads the header	Reads headers	Example header
	names.	names that with	names
		space and names	("Favorite Pizza
		without spaces	Topping")

Testing blacklist: (Important)

• Does the blacklist separate people that have blacklisted each other? (For example, person A and person B)

Pass/Fail	Output	Expected Output	How to Replicate
Although it correctly puts A1 with at least one other person that has not blacklisted him. V22, W23, X24, and Y25	Test 1 Group0: K11, I9, B2, P16, F6 Group1: T20, L12, Y25, N14, C3 Group2: W23, A1, M13, U21, E5 Group3: Q17, R18, D4, J10, O15 Group4: H8, G7, V22, S19, X24 Test 2 Group0: J10, W23, A1, Y25, M13 Group1: E5, D4, K11, T20, C3 Group2: U21, S19, H8, V22, B2 Group3: X24, L12, G7, I9, Q17 Group4: F6, O15, R18, P16, N14 Test 3 Group0: I9, C3, R18, M13, E5 Group1: X24, K11, P16, S19, O15 Group2: Q17, J10, W23, L12, B2 Group3: F6, D4, T20, U21, N14 Group4: A1, Y25, G7, H8, V22	According to the csv file for Group25.csv it should not put person A1 with anyone that has blacklisted him. When sorting 25 people into 5 groups He should be with the four people that haven't blacklisted him v22, w23, x24, and y25	Read Group25.csv Choose either by student or by group Random (No) Blacklist (Yes) No for everything else.

Test 4	
Group0: I9, C3, R18, M13, E5	
Group1: X24, K11, P16, S19, O15	
Group2: Q17, J10, W23, L12, B2	
Group3: F6, D4, T20, U21, N14	
Group4: A1, Y25, G7, H8, V22	

• Does it crash if blacklist is used or not?

Pass/Fail	Output	Expected Output	How to Replicate
Pass Pass	Did not crash	Does not crash	Read Group25.csv
			Choose by student or group Select no for random
			Hit enter for the rest

Groups

• What happens when there are uneven division (For example: 23 groups with 25 students)?

Pass/Fail	Output	Expected Output	How to
			Replicate
Works but is a bit	Creating 23	I expected when	Groups
weird in some	groups	creating 23 groups	23 [students]
cases		to have two groups	Yes
	All groups of 1 and	of 2 students and	[Randomized]
	1 group of 3	rest groups of 1.	No [Other
			Options]

Detail on Tests

Inputs	Outputs	Expected output	Pass/Fail
0 & negatives, Symbols,	Prints error message	This should not work	<mark>Pass</mark>
Characters, Letters, Etc.	invalid input.	Prints – Invalid input	
(0, -3, #, A)			
1	One group of 25	One group of 25	<mark>Pass</mark>
2	Message for groups may	One group of 12 and	<mark>Pass</mark>
	have extra students	One group of 13	
3	Two groups of 8, 1 group	•••	<mark>Pass</mark>
	of 9		
4		•••	<mark>Pass</mark>
5		5 groups of 5	Pass Pass

10	•	Expected 5 groups of 2 and 5 groups of 3	Pass
12			Pass Pass
15			<mark>Pass</mark>
22			<mark>Pass</mark>
23			<mark>Pass</mark>
24			<mark>Pass</mark>
25		25 groups with one person each	<mark>Pass</mark>
26 & above	Prints error message –	Not possible	Pass
20 & above	Invalid input	Not possible	r dəə

- What happens if too many students in a group (Ex: 10 students per group with 25 students total)?
- Does it get an index out of range?

Pass/Fail	Output	Expected Output	How to
			Replicate
<mark>Fail</mark>	Index out of range	Print an error	N (create by
		message saying	students)
Works on some		invalid input for	
cases		values within the	10
		proper range, but	
		not able to	Y (Randomized)
		separate into	
		<mark>groups</mark>	

This Works fine for smaller numbers such as 3.

It currently prints out invalid input when using characters, negative numbers, zero, letters, etc.

Input

• Does it crash when nothing is selected?

Pass/Fail	Output	Expected Output	How to
			Replicate
Works, may need	Successfully		Choose either
more testing.	creates groups		by student or
			group
			Hit enter for all
			options

• Does it take case sensitivity?

Pass/Fail	Output	Expected Output	How to
			Replicate
Pass			

• Does it take in (characters, symbols, letters, anything other than numbers)?

Pass/Fail	Output	Expected Output	How to
			Replicate
Pass	Doesn't take any out of the ordinary values. Only accepts numbers.		

Test does it output csv files?

Pass/Fail	Output	Expected Output	How to
			Replicate
Pass Pass			

Test a CSV file with 25 students.

Test a CSV file with 27 students.

Tested creating groups using category 1, puts them together.

Note: Needs further testing in future

How would you like to have your groups created?

By number of students per group[N]?:

Or

By how many groups will be made[G]:

G

How many groups will be made?5

Would you like the groups to be completely randomized? [Y/n]: n

Would you like to use the blacklist? [Y/n]: n

Would you like to create groups based on Favorite Pizza Topping? [Y/n]: Y

Should groups have similar values or different values? [S/D]:S

True

Would you like to create groups based on Favorite Color? [Y/n]: n

Would you like to create groups based on Favorite Sport? [Y/n]: n