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Assignment 2

ZigZag

The main goal of this assignment is to allow the user to input a string and an number of rows, then output the string zigzagged across that many rows. I decided to ignore any spaces and capitalize the strings just to make them look better. My program first prompts the user to enter a string and a number of rows, and then uses an zigzagConversion method to zigzag the original string across the specified amount of rows. The program then continues to output the original and zigzagged strings. One issue I had to take care of was getting rid of any potential spaces with a replaceAll command. Replace all made the most sense here because we wanted to get rid of all spaces in the given string. To zigzag the string, I used a String array that was the size of how many rows. I also used a Boolean to simulate the zigzag pattern of moving back and forth. The string array had some weird interaction for several reasons. One was it initiated every string to null, so I had to make a for loop to make all the string empty. Also the concat command and the for each loop were not working how I wanted them too so I had to work around this with some similar commands such as <code> output[currentRow-1] = output[currentRow-1] + str.substring(i, i+1); </code> If I were to do this again I would like to clean up my zigzag method and find a simpler work around for some of my problems.

Test Cases:

Please enter a String that you would like ZigZaged:

Super CAlifragilistic

Please enter how many rows that you would like ZigZaged:

7

Original String: SUPERCALIFRAGILISTIC

Zig-Zag (7 rows): SGUAIPRLEFIRISCLTCAI

Please enter a String that you would like ZigZaged:

GonzagaBullDogsss

Please enter how many rows that you would like ZigZaged:

4

Original String: GONZAGABULLDOGSSS

Zig-Zag (4 rows): GAOOGBDGNAULSSZLS

Please enter a String that you would like ZigZaged:

Pool

Please enter how many rows that you would like ZigZaged:

5

Original String: POOL

Zig-Zag (5 rows): POOL