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Program #2 Algorithm

Step 1 Welcome the user

1. Give the user a brief explanation about what this code does
2. Display three categories that user can type in

Step 2 Get the user input for three categories

1. Display "Please type your (first category)."
2. Get the user input for first category
3. Display the user input for first category
4. Display "Is it correct? (Y/N)"
5. Get the user input
6. If the user input is 'N', then display "Please re-type your (first category)." and move back to step 2 number 2
7. If the user input is not 'Y' and not 'N', then display "Please type 'Y' or 'N'." and move back to step 2 number 5
8. Display "Please type your (second category)."
9. Get the user input for second category
10. Display the user input for second category
11. Display "Is it correct? (Y/N)"
12. Get the user input
13. If the user input is 'N', then display "Please re-type your (second category)." and move back to step 2 number 8
14. If the user input is not 'Y' and not 'N', then display "Please type 'Y' or 'N'." and move back to step 2 number 12
15. Display "Please type your (third category)."
16. Get the user input for third category
17. Display the user input for third category
18. Display "Is it correct? (Y/N)"
19. Get the user input
20. If the user input is 'N', then display "Please re-type your (third category)." and move back to step 2 number 16
21. If the user input is not 'Y' and not 'N', then display "Please type 'Y' or 'N'." and move back to step 2 number 19

Step 3 Inform the user if two or more categories contain the exact same information

1. Compare first category and second category
2. If first category and second category contain exact same information, display “(first category) and (second category) contain exact same information. Please re-type your answers from the beginning.” and move back to step 2 number 2
3. Compare first category and third category
4. If first category and third category contain exact same information, display “(first category) and (third category) contain exact same information. Please re-type your answers from the beginning.” and move back to step 2 number 2
5. Compare second category and third category
6. If second category and third category contain exact same information, display “(second category) and (third category) contain exact same information. Please re-type your answers from the beginning.” and move back to step 2 number 2

Step 4 Capitalize first character and first character after each period for all categories

1. Capitalize first character of all three categories
2. Capitalize first character after each period in first category using for loop
3. Capitalize first character after each period in second category using for loop
4. Capitalize first character after each period in third category using for loop

Step 5 Ask the user for a word they would like to search for

1. Display “Please type a word that you would like to search for.”
2. Get the user input
3. Display the user input
4. Display “Is it correct? (Y/N)”
5. Get the user input
6. If the user input is ‘N’, then display “Please re-type a word that you would like to search for.” and move back to step 5 number 2
7. If the user input is not ‘Y’ and not ‘N’, then display “Please type ‘Y’ or ‘N’.” and move back to step 5 number 5
8. Check if the word is in first, second, or third category using own function that uses loop
9. If there is no matching result, then display “There is no result for searching (word). Would you like to search different word? (Y/N)”
 - a. Get the user input
 - b. If the user input is ‘Y’, then move back to step 5 number 1

- c. If the user input is not 'Y' and not 'N', then display "Please type 'Y' or 'N'." and move back to (a)

10. If there is matching result, then display "(word) is in (first, second, or third category)."

Step 6 Display three categories

1. Display "(first category) : (user input for first category)."
2. Display "(second category) : (user input for second category)."
3. Display "(third category) : (user input for third category)."

Step 7 Ask the user if the user want to do it again

1. Display "Would you like to do it again? (Y/N)"
2. Get the user input
3. If the user input is 'Y', then move back to step 1 number 2
4. If the user input is not 'Y' and not 'N', then display "Please type 'Y' or 'N'." and move back to step 7 number 2
5. If the user input is 'N', the program ends