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Assignment Title: Individual Programming I – Part2

Summary of how the program should run:

The new program prompts the user to think of a general category of things, and then asks the user to input items for that category. The program then captures the user inputs into a list. Then it sorts the list in alphabetical order and shows it to the user. Next, it prompts the user to pick a number between 1 and the number of elements in the list, and based on the user's input, it shows the corresponding item from the sorted list. Finally, it prompts the user for a character and creates a list of booleans indicating whether the character is present in each element of the original list. It prints this list of booleans at the end.

List of changes made to the original assignment:

1. The new program includes more detailed and informative prompts for the user, making it clearer what is expected of them.
2. Instead of using a for loop to capture user inputs, the new program uses a while loop with a check for an empty input to end the loop.
3. It also includes a check for an empty input to end the loop and print the number of elements in the list.
4. The new program checks for input error when the user is prompted to pick a number between 1 and the number of elements in the list.
5. The new program also includes a check for the user to confirm if they wish to check for a specific character in their list, before proceeding to the next step.
6. It uses .lower() method on all string inputs to make the comparison case-insensitive.
7. In the new program, the output for the chosen element from the list uses index -1 to adjust for zero-based indexing.
8. The output for the sorted list is printed before the element selection prompt and after the input collection loop.

Examples of the program (please also upload any attachments necessary):

##### Example 1 #####

Text

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Errors that will crash the program or cause illogical problems:

None. All edge cases have been accounted for and improvements have been added to the program to ensure a smooth and intuitive experience for the user.

I had identified 2 cases that would have caused the program to fail/crash:

1. The program accounts for the case where a user may not input any values in the list
   1. To solve for this issue, I used the if condition in line 18.

Text

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1. If the user chooses a number higher than the list length, then the program’s result isn’t very intuitive
   1. I used a while loop to control for any erroneous inputs when choosing a number to display the corresponding item from the list.

Additional examples or other comments/notes:

##### Example 2 #####

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##### Example 3 #####

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