Credit Name:CSE3110
Assignment Name:ReverseList

How has your program changed from planning to coding to now? Please explain?

Step 1: Define the ReverseList Class
- Declare the ReverseList class, which represents a stack implemented using an ArrayList.
- Initialize the data ArrayList and set top to -1 (indicating no items in the list) in the constructor.

Step 2: Implement the top Method
- Return the item at the top index of the data ArrayList.

Step 3: Implement the pop Method
- Get the item at the top index of the data ArrayList and store it in the topItem variable.
- Remove the item at the top index from the data ArrayList.
- Decrement the top variable by 1.
- Return the topItem.

Step 4: Implement the push Method
- Increment the top variable by 1.
- Add the specified item to the data ArrayList at the top index.

Step 5: Implement the isEmpty Method
- Check if the top variable is -1. If it is, return true; otherwise, return false.

Step 6: Implement the size Method
- Check if the stack is empty using the isEmpty method.
- If the stack is empty, return 0.
- If the stack is not empty, return top + 1 to represent the number of items in the stack.

Step 7: Implement the makeEmpty Method
- Set the top variable to -1 to empty the stack.

Step 8: Define the ReverseListTester Class
- Declare the ReverseListTester class, which contains the main method.

Step 9: Create a ReverseList Object and Perform Operations
- Create a ReverseList object named stack.
- Create a Scanner object named scanner to read user input.
- Prompt the user to enter up to 10 numbers or enter 999 to terminate.
- Use a while loop to read the input numbers from the user and push them onto the stack until 10 numbers are entered or the user enters 999.
- Print "The reversed list of numbers is:".
- Use a while loop to pop and print each number from the stack until the stack is empty.