Test case 1:

Precondition: The program is closed and all data is cleared

Step	Expected result
Run the program with the argument “FirstInput.txt” , (0, 255, 0), “FirstOutput.txt”	The program reads the file “FirstInput.txt”
	The program sets favourite color to (0, 255, 0)
	The program processes the image data
	Identifies all pixels with the color (0, 255, 0)
	Changes the left and top neighbors of each identified pixel to (0, 255, 0) where applicable
	The program writes the modified data to “FirstOutput.txt”
Close the program	The program closes without crashes

Test case 2:

Precondition: The program is closed and all data is cleared

Step	Expected result
Run the program with the argument “SecondInput.txt” , (0, 255, 0), “SecondOutput.txt”	The program reads the file “SecondInput.txt”
	The program sets favourite color to (0, 255, 0)
	The program processes the image data
	Doesn’t find any pixels with the color (0, 255, 0)
	No changes are made to the data
	The program writes the original data to “SecondOutput.txt”
Close the program	The program closed without crashes

Test case 3:

Precondition: The program is closed and all data is cleared

Step	Expected result
Run the program with the argument “ThirdInput.txt” , (0, 255, 0), “ThirdOutput.txt”	The program reads the file
	The program sets favourite color to (0, 255, 0)
	The program processes the image data
	Detects non-integer values in the data
	The program displays an error message indicating invalid data format

	No output file is created
Close the program	The program closed without crashes

Test case 4:

Precondition: The program is closed and all data is cleared

Step	Expected result
Run the program with the argument “FourthInput.txt” , (0, 0, 255), “FourthOutput.txt”	The program reads the file “FourthInput.txt”
	The program sets favourite color to (0, 0, 255)
	The program processes the image data
	Detects values out of the range 0-255
	The program displays an error message indicating invalid data format
	No output file is created
Close the program	The program closed without crashes

Test case 5:

Precondition: The program is closed and all data is cleared

Step	Expected result
Run the program with the argument “FifthInput.txt” , (255, 180, 245), “FifthOutput.txt”	The program reads the file “FifthInput.txt”
	The program sets favourite color to (255, 180, 245)
	The program processes the image data
	Identifies pixels with the color (255, 180, 245) located at the borders of the image
	Changes only applicable neighbors (top or left, if they exist) to (255, 180, 245)
	The program writes the modified data to “FifthOutput.txt”
Close the program	The program closed without crashes