System Level Tests

The following is a system level test used for a math calculator program.

Purpose:
1. To ensure that each math operator performs the desired action
2. To ensure that each math operator produces the correct answer
3. To ensure usability of the program

Setup:
1. Launch NetBeans or any other preferred Java IDE platform
2. Click into cit360 source package
3. Obtain the most current version from GitHub
    a. Connect to rdodenbier GitHub repository
    b. Pull the latest repository build files
4. Run program
5. Enter #7 on the keyboard to enter into the calculator program

Test Data:

Action	Input	Expected Output
Launch Program		Text: "Enter your first number:"
Enter first number	2 <enter>	Text: "Enter a math operator (+, -, *, /, ^):"
Enter math operator	* <enter>	Text: "Enter your second number:"
Enter second number	7 <enter>	Text: "2 * 7 = 14"
Return to main menu		Main Menu is displayed
Exit program	Q	Text: "BUILD SUCCESSFUL"

Action	Input	Expected Output
Launch Program		Text: "Enter your first number:"
Enter first number	2 <enter>	Text: "Enter a math operator (+, -, *, /, ^):"
Enter math operator	+ <enter>	Text: "Enter your second number:"
Enter second number	7 <enter>	Text: "2 + 7 = 9"
Return to main menu		Main Menu is displayed
Exit program	Q	Text: "BUILD SUCCESSFUL"

Action	Input	Expected Output
Launch Program		Text: "Enter your first number:"
Enter first number	2 <enter>	Text: "Enter a math operator (+, -, *, /, ^):"

Enter math operator	^ <enter>	Text: "Enter your second number:"
Enter second number	7 <enter>	Text: "2 ^ 7 = 128"
Return to main menu		Main Menu is displayed
Exit program	Q	Text: "BUILD SUCCESSFUL"

Action	Input	Expected Output
Launch Program		Text: "Enter your first number:"
Enter first number	10 <enter>	Text: "Enter a math operator (+, -, *, /, ^):"
Enter math operator	/ <enter>	Text: "Enter your second number:"
Enter second number	2 <enter>	Text: "10 / 2 = 5"
Return to main menu		Main Menu is displayed
Exit program	Q	Text: "BUILD SUCCESSFUL"

Action	Input	Expected Output
Launch Program		Text: "Enter your first number:"
Enter first number	7 <enter>	Text: "Enter a math operator (+, -, *, /, ^):"
Enter math operator	- <enter>	Text: "Enter your second number:"
Enter second number	2 <enter>	Text: "7 -2 = 5"
Return to main menu		Main Menu is displayed
Exit program	Q	Text: "BUILD SUCCESSFUL"