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| **Requirement**  **to Test** | **Test Action** | **Expected Outcome** | **Actual Outcome** |
| 1. Interface displayed when program runs. | 1. Run Program. |  |  |
|  | 2. Close program by clicking on X in upper right corner. | Program closes. |  |

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| **Requirement**  **to Test** | **Test Action** | **Expected Outcome** | **Actual Outcome** |
| 2. Enter an invalid operator calculation. Invalid characters and operations should be handled gracefully. | 1. Run Program. |  |  |
|  | 2. Push Enter. |  |  |
|  | 3. Enter your calculations here:  \*10\* |  |  |
|  | 4. Enter your calculations here:  /10/ |  |  |
|  | 9. Enter your calculations here:  # |  |  |
|  | 10. Enter your calculations here:  = |  |  |
|  | 11. Enter your calculations here:  %10/ |  |  |
|  | 12. Enter your calculations here:  +10%$ |  |  |
|  | 13. Enter your calculations here:  Asdf |  |  |
|  | 14. Enter your calculations here:  as25df |  |  |
|  | 15. Enter your calculations here:  !@$%^&() |  |  |
|  | 16. Click the X in the upper right corner to close the program. |  |  |

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| **Requirement**  **to Test** | **Test Action** | **Expected Outcome** | **Actual Outcome** |
| 3. Enter valid operator calculations. | 1. Run program. |  |  |
|  | 2. Enter your calculations here:  -10  Push + |  |  |
|  | 3. Enter your calculations here:  +10  Push + |  |  |
|  | 4. Enter your calculations here:  -10  Push \* |  |  |
|  | 5. Enter your calculations here:  -2  Push + |  |  |
|  | 6. Enter your calculations here:  <Enter>10  Push # |  |  |
|  | 7. Enter your calculations here:  <Enter>30  Push - |  |  |
|  | 8. Enter your calculations here:  <Enter>5  Push / |  |  |
|  | 9. Enter your calculations here:  +5  Push = |  |  |
|  | 10. Click the X in the upper right corner to close the program. |  |  |

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| **Requirement**  **to Test** | **Test Action** | **Expected Outcome** | **Actual Outcome** |
| 4. Update a line with an invalid calculation. | 1. Run program. |  |  |
|  | 2. Enter your calculations here:  +10  Push \* |  |  |
|  | 3. Enter your calculations here:  <Enter>10  Push + |  |  |
|  | 4. Enter your calculations here:  -5  Push = |  |  |
|  | 5. In the listbox, select the line:  \* 10 |  |  |
|  | 6. Change the text in the bottom textbox to:  % 5  Push Update |  |  |
|  | 7. Change the text in the bottom textbox to:  \* a  Push Update |  |  |
|  | 8. Change the text in the bottom textbox to:  Push Update |  |  |
|  | 9. Change the text in the bottom textbox to:  # 5  Push Update |  |  |
|  | 10. Click the X in the upper right corner to close the program. |  |  |

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| **Requirement**  **to Test** | **Test Action** | **Expected Outcome** | **Actual Outcome** |
| 5. Update a line with a valid calculation. | 1. Run program. |  |  |
|  | 2. Enter your calculations here:  +10  Push \* |  |  |
|  | 3. Enter your calculations here:  <Enter>10  Push + |  |  |
|  | 4. Enter your calculations here:  -5  Push = |  |  |
|  | 5. In the listbox, select the line:  \* 10 |  |  |
|  | 6. Change the text in the bottom textbox to:  /20  Push Update |  |  |
|  | 7. In the listbox, select the line:  / 20 |  |  |
|  | 8. Change the text in the bottom textbox to:  -20  Push Update |  |  |
|  | 9. In the listbox, select the line:  - 20 |  |  |
|  | 10. Change the text in the bottom textbox to:  +20  Push Update |  |  |
|  | 11. In the listbox, select the line:  +20 |  |  |
|  | 12. Change the text in the bottom textbox to:  \* -10  Push Update |  |  |
|  | 13. In the listbox, select the line:  \* -10 |  |  |
|  | 14. Change the text in the bottom textbox to:  / -10  Push Update |  |  |
|  | 15. Click the X in the upper right corner to close the program. |  |  |

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| **Requirement**  **to Test** | **Test Action** | **Expected Outcome** | **Actual Outcome** |
| 6. Insert a line with an invalid calculation. | 1. Run program. |  |  |
|  | 2. Enter your calculations here:  +10  Push \* |  |  |
|  | 3. Enter your calculations here:  <Enter>10  Push + |  |  |
|  | 4. Enter your calculations here:  -5  Push = |  |  |
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| **Requirement**  **to Test** | **Test Action** | **Expected Outcome** | **Actual Outcome** |
| 7. Insert a line with a valid calculation. | 1. Run program. |  |  |
|  | 2. Enter your calculations here:  +10  Push \* |  |  |
|  | 3. Enter your calculations here:  <Enter>10  Push + |  |  |
|  | 4. Enter your calculations here:  -5  Push = |  |  |
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| **Requirement**  **to Test** | **Test Action** | **Expected Outcome** | **Actual Outcome** |
| 8. Delete a line. | 1. Run program. |  |  |
|  | 2. Enter your calculations here:  +10  Push \* |  |  |
|  | 3. Enter your calculations here:  <Enter>10  Push + |  |  |
|  | 4. Enter your calculations here:  -5  Push = |  |  |
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| **Requirement**  **to Test** | **Test Action** | **Expected Outcome** | **Actual Outcome** |
| 9. File Menu. | 1. Run program. |  |  |
|  | 2. Enter your calculations here:  +10  Push \* |  |  |
|  | 3. Enter your calculations here:  <Enter>10  Push + |  |  |
|  | 4. Enter your calculations here:  -5  Push = |  |  |
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