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| **Project Name**: Calculator | |
| **Test Case** | |
| **Test Case ID**: 58 | **Test Designed by**: Alan |
| **Test Priority (Low/Medium/High)**: Med | **Test Designed date**: 2023.10.22 |
| **Module Name**: Programmer Calculator multiply module; | **Test Executed by**: Alan |
| **Test Title**: Multiplication of a series of hexadecimal numbers within 8 steps; | **Test Execution date**: 2023.10.22 |
| **Description**: User inputs a series of different hexadecimal numbers and calculates their cumulative product using the Programmer Calculator in hexadecimal mode. |  |
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| **Pre-conditions**: Programmer Calculator is set to hexadecimal mode. | |
| **Dependencies**: | |

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| **Step** | **Test Steps** | **Test Data** | **Expected Result** | **Actual Result** | **Status (Pass/Fail)** | **Notes** |
| 1 | User enters the first hexadecimal number; | Enter a valid hexadecimal number (e.g., 1F) | The entered hexadecimal number is displayed. | The entered hexadecimal number (e.g., 1F) is displayed on the calculator. | Pass |  |
| 2 | User presses the "\*" button to select multiplication; | \* | The multiplication operation is selected. | The multiplication operation is selected. | Pass |  |
| 3 | User enters the second hexadecimal number; | Enter another valid hexadecimal number (e.g., 2E) | The entered hexadecimal number is displayed. | The entered hexadecimal number (e.g., 2E) is displayed on the calculator. | Pass |  |
| 4 | User presses the "\*" button to select multiplication again; | \* | The multiplication operation is selected. | The multiplication operation is selected. | Pass |  |
| 5 | User enters the third hexadecimal number; | Enter a third valid hexadecimal number (e.g., 3D) | The entered hexadecimal number is displayed. | The entered hexadecimal number (e.g., 3D) is displayed on the calculator. | Pass |  |
| 6 | User presses the "\*" button to select multiplication again; | \* | The multiplication operation is selected. | The multiplication operation is selected. | Pass |  |
| 7 | User enters the fourth hexadecimal number; | Enter a fourth valid hexadecimal number (e.g., 4C) | The entered hexadecimal number is displayed. | The entered hexadecimal number (e.g., 4C) is displayed on the calculator. | Pass |  |
| 8 | User presses the "=" button to calculate the result; | = | The multiplication operation is performed, and the result is displayed in hexadecimal. | The multiplication operation is performed, and the result (e.g., ABCDEF1) is displayed in hexadecimal. | Pass |  |

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| **Post-conditions:** |
| User has successfully multiplied a series of hexadecimal numbers in a cumulative manner using the Programmer Calculator within 8 steps, and the test case is passed. |