**Testing Documentation for Square Root Calculator Program**

This document outlines a set of test cases designed to evaluate the Square Root program. The purpose of these tests is to ensure the application’s reliability, accuracy and usage across a variety of scenarios. The outcomes of these tests are important in assessing the program’s overall performance and functionality. Additionally, it helps in identifying any areas that require improvements or adjustments.

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| **Id** | **Description** | **Input** | **Expected** | **Actual** | **Result** |
| TC01 | Calculate square root of a large number | 1471369 | Square root of 1471369 = 1213.0 (approx..) | 1213.0000000394016 | Pass |
| TC02 | Calculate square root of a mid-range number | 25 | Square root of 25 = 5.0 (approx.) | 5.000023178253949 | Pass |
| TC03 | Calculate square root of a small number | 0.05 | Square root of 0.05 = 0.2236(approx.) | 0.22365388024986854 | Pass |
| TC04 | Calculate square root of 1 | 1 | Square root of 1 = 1.0 | 1.0000052895642693 | Pass |
| TC05 | Input zero | 0 | Error message “Invalid input. Please enter a number greater than 0.” | Invalid input. Please enter a number greater than 0.  Enter a positive number to calculate its square root: | Pass |
| TC06 | Input a non-numeric value | One | Error message “Invalid input. Please enter a number greater than 0.” | Invalid input. Please enter a number greater than 0.  Enter a positive number to calculate its square root: | Pass |
| TC07 | Input a negative number | -1 | Error message “Invalid input. Please enter a number greater than 0.” | Invalid input. Please enter a number greater than 0.  Enter a positive number to calculate its square root: | Pass |
| TC08 | Continue with another calculation | Y | Prompt for a new number input | Enter a positive number to calculate its square root: | Pass |
| TC09 | Stop calculations | N | Program ends | --- Program Ended --- | Pass |
| TC10 | Invalid input for continue calculation prompt | Z | Error message "Invalid input. Please enter 'y' for yes or 'n' for no." | Invalid input. Please enter 'y' for yes or 'n' for no.  Would you like to calculate another square root? (y/n): | Pass |