

<C++ Calculator>
Version <1.0>

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•Purpose

The purpose of this document is to show all of the test cases that were used to ensure the completeness of our Calculator. While also covering the hardware and software specs that are needed to ensure no problems across machines. By using multiple testing methods like black and white box testing to generate test cases we hope to find all or most of the bugs in our program with documentation.

Name/ID	Testing Features	input	Expected output	Actual output
Exit	First if statement to exit program	0	Program ends	
Multiplication	Checks multiply function	2 * 3	6	
Division	Checks divide function	6/2	3	
Divison_0	Checks divide function dividing by Zero	5/0	Runtime_error	

Add	Checks add function	$2 + 4$	6	
Subtract	Checks subtract function	$7 - 5$	2	
Subtract negative	Checks subtract when the return value is negative	$5 - 7$	-2	
Exponent	Checks exponent function	2^3	8	
Modulus	Checks Modulus function	$6 \% 4$	2	
Precedence_1	Checks precedence and stack functions	$2 + 3 * 5$	17	
Precedence_2	Checks precedence and stack functions	$(2^3) + 5$	13	
Precedence_3	Checks precedence and stack functions	$(2 + 3) * 5$	25	
Precedence_4	Checks precedence and stack functions	$2 / 3 + 5 * 6$	20	

•Hardware

There are no hardware specifications required for our C++ calculator other than a basic computer machine that can compile and run the files.

- Software**

The hardware specifications for our C++ Calculator is running the current version of C++20 to ensure all functions and keywords work as they should