

Test Cases for Simple Calculator

Test Case ID	Description	Input	Expected Output	Notes
TC01	Addition of two positive numbers	5 + 3	8	Basic addition
TC02	Addition of positive and negative	5 + (-3)	2	Handle negative numbers
TC03	Addition of two negative numbers	(-5) + (-3)	-8	Sum of negatives
TC04	Subtraction of two positive numbers	10 - 4	6	Basic subtraction
TC05	Subtraction resulting in negative	3 - 5	-2	Result negative
TC06	Multiplication of two positive numbers	7 * 6	42	Basic multiplication
TC07	Multiplication by zero	7 * 0	0	Multiplying by zero
TC08	Multiplication of positive and negative	7 * (-3)	-21	Negative product
TC09	Division of two positive numbers	20 / 4	5	Basic division
TC10	Division resulting in decimal	7 / 2	3.5	Decimal result
TC11	Division by zero	5 / 0	Error / Exception	Should handle division by zero gracefully
TC12	Addition with zero	0 + 5	5	Adding zero
TC13	Subtraction with zero	5 - 0	5	Subtract zero
TC14	Multiplication of zero and zero	0 * 0	0	Zero times zero
TC15	Division of zero by a number	0 / 5	0	Zero divided by any number
TC16	Large number addition	1000000 + 2000000	3000000	Check for handling large numbers
TC17	Input with decimal numbers	3.5 + 2.1	5.6	Decimal input
TC18	Invalid input (non-numeric)	"a" + 5	Error / Exception	Handle invalid input gracefully
TC19	Multiple operations (if supported)	5 + 3 * 2	11 or 16 (depends)	Verify operator precedence
TC20	Empty input	"" (no input)	Error / prompt	Should handle empty inputs