General Notes

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1. “Add” operation do “Concatenate” operation not “Add” operation (integer and/or decimal)

2. “Concatenate” operation do “Add” operation not “Concatenate” operation

3. Clear button should clear all fields not just only the result field

4. Blank spaces (empty values) should be handled by displaying error message

5. Two empty values should be handled by displaying error message

6. After divide by zero, error message displayed but the page keeps freezing

Test Cases

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(1) Addition (all test cases passed)

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1. Should be able to add two positive integers numbers

2. Should be able to add a negative integer to a positive floating-point number

3. Should be able to add a floating-point number to an integer

4. Should be able to add an integer to a floating-point number

5. Should be able to add two floating point numbers

6. Should be able to add a negative integer and zero

7. Should be able to add zero and a positive integer

8. Should be able to add a negative integer with a positive number

9. Should be able to add two large positive integers

10. Should be able to add a negative floating point and a positive integer

11. An addition of a negative floating-point addend, to an integer addend should be treated as a subtraction of a positive integer subtrahend

12. An addition of a negative floating-point addend should be treated as a subtraction of a positive floating-point subtrahend

13. An addition of a negative integer addend should be treated as a subtraction of a positive integer subtrahend

14. An addition of a negative integer addend to another negative integer addend should be treated as a subtraction of a positive integer subtrahend

15. Clear button should clear answer field

(2) Subtraction (all test cases passed)

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1. Should be able to subtract two positive integers

2. Should be able to subtract zero from a negative integer

3. Should be able to subtract 0 from a positive integer

4. Should be able to subtract a floating-point number from a negative integer

5. Should be able to subtract an integer from a floating-point number

6. Should be able to subtract a floating-point number from an integer

7. Should be able to subtract two floating point numbers

8. Should be able to subtract two max-input floating point numbers

9. Should be able to subtract an integer from a negative floating-point number

10. Should be able to subtract two large integers

11. Should be able to subtract two floating point numbers with many digits

(3) Division (all test cases passed)

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1. Should report error for division by zero

2. Should be able to divide two positive integers

3. Should be able to divide 0 by an integer divisor

4. Should be able to divide a negative dividend by a positive divisor

5. Should be able to divide a negative floating-point dividend by a positive divisor

6. Should be able to divide a negative integer dividend by a positive floating-point divisor to nine significant figures

7. Should be able to divide a floating-point dividend by an integer divisor

8. Should be able to divide an integer dividend by a floating-point divisor

9. Should be able to divide two floating point numbers

10. Should be able to divide too many digit floating point numbers

(4) Multiplication (all test cases passed)

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1. Should be able to multiply two positive integers

2. Should be able to multiply a floating point multiplicand with an integer multiplier

3. Should be able to multiply an integer multiplicand with a floating-point multiplier

4. Should be able to multiply two floating point numbers

5. Should be able to multiply an integer multiplicand with zero

6. Should be able to multiply a negative integer multiplicand with a positive integer multiplier

7. Should be able to multiply a negative floating-point multiplicand with a positive integer multiplier

8. Should be able to multiply a negative integer multiplicand with a positive floating-point multiplier

9. Should be able to multiply too many digit floating point numbers

10. Should be able to multiply two large integers

(5) Error guessing (all test cases passed)

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1. should not allow very long number (greater than 10 digits)

2. should not allow special characters

3. should trim leading empty spaces

4. should not allow first character special character

5. should allow first character can be dot

6. should not allow number contain spaces

7. should not allow number with more than 1 dot

8. should not allow all blank spaces (empty values)

9. should not allow leading and trailing spaces

10. should not allow two empty values