

Test Case for Calculator

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# Test Case for Calculator
# Instructions: case_result, expected_result, next_case
# Jump to failure if any instruction fails

# Assume $0 is always 0
# Load Immediate Values
00000001      ; li $1, 2          # Load immediate value 2 into $1
00000010      ; li $2, 3          # Load immediate value 3 into $2

# Arithmetic Operations
00000011      ; add $3, $1, $2    # Add $1 and $2, result in $3
00000100      ; sub $4, $1, $2    # Subtract $2 from $1, result in $4
00000101      ; mul $5, $1, $2    # Multiply $1 and $2, result in $5
00000110      ; div $6, $1, $2    # Divide $1 by $2, result in $6

# Conditional Branch
00000111      ; bgt $3, $4        # If addition result > subtraction result, branch

# Print Results
00001000      ; pr $3             # Print addition result
00001001      ; pr $4             # Print subtraction result
00001010      ; pr $5             # Print multiplication result
00001011      ; pr $6             # Print division result
```