

EE404 - HW#1 - Calculator

Write in x86 assembly code a
 four function integer calculator
 capable of performing (+, -, *, /).

Assume that the operands are
 quad words and signed integers.

Memory (segment .data)

operation	dq
operand A	dq
operand B	dq
result low	dq
result high	dq

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operation = ϕ - Add
1 - Subtract
2 - Multiply
3 - Division.

Example.

Set operation = ϕ
operand 1 = $1\phi\phi$
operand 2 = $2\phi\phi$

- ① Read value of operation from memory
- ② Determine which function to perform
- ③ Perform function. by reading operand A and operand B
- ④ $1\phi\phi + 2\phi\phi = 3\phi\phi$
Store result in result low

- ⑤ utilize result low &
result high for multiply.

Hints: Use the following instructions
with reference from book &
google.

- A) mov
 - B) add, sub, imul, idiv
 - C) cmp
 - D) jz, jmp
 - E) cgo
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- A) Test your code on ebe
- B) Turn in hard copy of your code.
- C) Grading on this assignment is pass/fail
 - There are no wrong answers here
 - This is a process based exercise.