Y86 Instructions

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July 15, 2016

1 Instruction in Byte Representations

Table 1: Instruction Table

Instruction	encoding bytes					
	0	1	2	3	4	5
nop	00					
halt	10					
rrmovl	20	rA—rB				
irmovl	30	F—rB	4 Bytes Value			
rmmovl	40	rA—rB	4 Bytes displacement			
mrmovl	50	rA—rB	4 Bytes displacement			
op1	6—fn	rA—rB				
jXX	7—fn	4 Bytes displacement				
call	80	4 Bytes displacement				
ret	90					
pushl	A0	rA—F				
popl	B0	rA—F				
readX	C—fn	rA—F	4 bytes displacement			
writeX	D—fn	rA—F	4 bytes displacement			

Table 2: op1 table

addl	6	0
subl	6	1
andl	6	2
xorl	6	3
mull	6	4

Table 3: jXX table

jmp	7	0
jle	7	1
jl	7	2
je	7	3
jne	7	4
jge	7	5
jg	7	6

Table 4: read table

readb	C	0
readl	C	1

Table 5: write table

writeb	D	0
writel	D	1