

Operand Practice

CPU

register	value
%eax	0x2
%ecx	0x304
%esi	0x4
%edi	0x30C

Memory

address	value
0x300	0xA
0x304	0xB
0x308	0xC
0x30C	0xD

operand	meaning	value
0x300	$M[0x300]$	$0xA = 10$
%eax	$R[\%eax]$	$0x2 = 2$
(%ecx)	$M[R[\%ecx]] = M[0x304]$	$0xB = 11$
(%esi, %ecx)	$M[R[\%esi]+R[\%ecx]]$ $= M[0x4+0x304] = M[0x308]$	$0xC = 12$

Operand Practice

CPU		Memory	
register	value	address	value
<code>%eax</code>	<code>0x2</code>	<code>0x300</code>	<code>0xA</code>
<code>%ecx</code>	<code>0x304</code>	<code>0x304</code>	<code>0xB</code>
<code>%esi</code>	<code>0x4</code>	<code>0x308</code>	<code>0xC</code>
<code>%edi</code>	<code>0x30C</code>	<code>0x30C</code>	<code>0xD</code>

operand	meaning	value
<code>\$0x300</code>	<code>0x300</code>	<code>0x300 = 768</code>
<code>0x300(%esi)</code>	$M[0x300+0x4]$ $= M[0x300+0x4] = M[0x304]$	<code>0xB = 11</code>
<code>0x300(%esi, %eax, 4)</code>	$M[0x300+0x4+R[\%eax]\times 4]$ $= M[0x300+0x4+0x2\times 4]$ $= M[0x30C]$	<code>0xD = 13</code>