

leaq vs. movq example

Registers

<code>%rax</code>	
<code>%rbx</code>	
<code>%rcx</code>	<code>0x4</code>
<code>%rdx</code>	<code>0x100</code>
<code>%rdi</code>	
<code>%rsi</code>	

Memory

	Address
<code>0x400</code>	<code>0x120</code>
<code>0xf</code>	<code>0x118</code>
<code>0x8</code>	<code>0x110</code>
<code>0x10</code>	<code>0x108</code>
<code>0x1</code>	<code>0x100</code>

```

leaq (%rdx, %rcx, 4), %rax
movq (%rdx, %rcx, 4), %rbx
leaq (%rdx), %rdi
movq (%rdx), %rsi

```

leaq vs. movq example (solution)

Registers

<code>%rax</code>	<code>0x110</code>
<code>%rbx</code>	<code>0x8</code>
<code>%rcx</code>	<code>0x4</code>
<code>%rdx</code>	<code>0x100</code>
<code>%rdi</code>	<code>0x100</code>
<code>%rsi</code>	<code>0x1</code>

Memory

	Address
<code>0x400</code>	<code>0x120</code>
<code>0xf</code>	<code>0x118</code>
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```

leaq (%rdx, %rcx, 4), %rax
movq (%rdx, %rcx, 4), %rbx
leaq (%rdx), %rdi
movq (%rdx), %rsi

```