

Full example:

load *(ebp - 4 + (edx * 4)) into eax

movl -4(%ebp, %edx, 4), %eax

Typical example:

load a stack variable into eax

movl -4(%ebp), %eax

No offset:

copy the target of a pointer into a register

movl (%ecx), %edx

Arithmetic:

multiply eax by 4 and add 8

leal 8(,%eax,4), %eax

Arithmetic:

multiply eax by 2 and add eax (i.e. multiply by 3)

leal (%eax,%eax,2), %eax