Examples - implicit rules for prefixing an offset with the corresponding segment register

Mov eax, [v] ; mov eax, DWORD PTR DS:[405000]

Mov eax, [ebx] ; mov eax, DWORD PTR DS:[ebx]
Mov eax, [ebp] ; mov eax, DWORD PTR SS:[ebp]

Mov eax, [ebp*2] ; mov eax, DWORD PTR SS:[ebp+ebp]
Mov eax, [ebp*3] ; mov eax, DWORD PTR SS:[ebp+ebp*2]
Mov eax, [ebp*4] ; mov eax, DWORD PTR DS:[ebp*4]

Mov eax, [ebx+esp] ; ESP – base… EBX – index ;EAX ← dword ptr [SS:esp+ebx]…
Mov eax, [esp + ebx] ; ESP – base… EBX – index ;EAX ← …SS:…

Mov eax, [ebx+esp*2] ; syntax error BECAUSE ESP can be ONLY a base register !
Mov eax, [ebx+ebp*2] ; mov eax, DWORD PTR [DS:EBX+EBP*2]

Mov eax, [ebx+ebp] ; …DS…
Mov eax, [ebp+ebx] ; …SS…

Mov eax, [ebx*2+ebp] ; …SS…

Mov eax, [ebx*1+ebp] ;…SS…
Mov eax, [ebp*1+ebx] ; …DS…

Mov eax, [ebx*1+ebp*1] ; ;…SS… - the first found scaled element is taken as index !! EBP - base
Mov eax, [ebp*1+ebx*1] ; …DS… - the first found scaled element is taken as index !! EBX - base

Mov eax, [ebp*1+ebx*2]; …SS…