

Addressing Modes Summary

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- Operands can be

- Immediate

e.g. `ADD AX, 5`

- Register

`ADD AX, BX`

- Memory

Addressing Modes Summary (contd.)

- Direct Addressing
 - `mov ax, [num1]`
- Based Register Indirect
 - `Mov [bp], ax`

Addressing Modes Summary (contd.)

- Indexed Register Indirect
 - Mov [si], ax
 - Mov ax, [di]
- Based Register Indirect + Offset
 - Mov [bx+300], ax
 - Mov ax, [bp+300]

Addressing Modes Summary (contd.)

- Indexed Register Indirect + Offset

- Mov [si+300], ax

- Mov ax, [di+300]

- Base + Index

- Mov [bx+si] , ax

- Mov [bx+si], 12345678h

Addressing Modes Summary (contd.)

- Base + Index + Offset
 - `Mov [bx+si+300] , ax`

Common Mistakes

- Address is 16-bit long, contained in 16-bit Register
- [BX+SI] is allowed, [BX-SI] is **NOT** allowed
- [Base+Base], [Index+Index] both **NOT** allowed, [Base+Index] is allowed