

# Conditional Jump in Assembly Language

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# Conditional Jump

Condition	Instruction	Condition	Instruction
<b>Jump if zero flag</b> <b>ZF=1</b>	JZ zero	Jump if zero flag ZF=0	JNZ notzero
<b>Jump if greater</b>	JG greater	Jump if greater than or equal	JGE notless
<b>Jump if less</b>	JL less	Jump if less than or equal	JLE notgreater
<b>Jump if Below</b>	JB smaller	Jump if carry flag CF=1	JC carry

# Example Code

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- ▶ `org 100h`
- ▶ `START:        mov cl, 03h`
- ▶ `LABEL_JNZ: dec cl`
- ▶ `jnz LABEL_JNZ`
- ▶ `mov bl, 04h`
- ▶ `mov al, 04h`
- ▶ `LABEL_JZ:    dec al`
- ▶ `dec bl`
- ▶ `xor bl, al`
- ▶ `jz LABEL_JZ`
- ▶ `mov bl, 02h`
- ▶ `mov al, 06h`

# Example Code

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- ▶ LABEL\_JG: dec al
- ▶           cmp al, bl
- ▶           **jg LABEL\_JG**
- ▶           mov bl, 06h
- ▶           mov al, 00h
- ▶
- ▶ LABEL\_JL: inc al
- ▶           cmp al, bl
- ▶           **jl LABEL\_JL**
- ▶
- ▶ ret

# Thank You !!

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