

```
.586
.MODEL FLAT
.STACK 4096      ; reserve 4096-byte stack
.DATA           ; reserve storage for data
cmpvalue DWORD 00000004FH
.CODE           ; start of main program code
main PROC
```

```
codebegin:
    mov eax, 000000038h
```

```
    cmp eax, cmpvalue
    jg jmpaddress
```

```
    cmp eax, cmpvalue
    jb jmpaddress
```

```
    mov eax, ebx
jmpaddress:
    mov eax, 0
    ret
main ENDP
```

```
END      ; end of source code
```

cmpvalue: 00000004Fh----->79

eax:38-----> 56

CMP eax,cmpvalue

jl jmpaddress

Overflow	OV	OF
Direction	UP	
Interrupt	EI	
Sign	PL	SF
Zero	ZR	ZF
Auxiliary	AC	
Parity	PE	
Carry	CY	CF

Conditional Jumps – mnemonics/code

Instruction	Description	signed-ness	Flags	Short jump opcodes	near jump opcodes
JO	Jump if overflow		OF = 1	70	0F 80
JNO	Jump if not overflow		OF = 0	71	0F 81
JS	Jump if sign		SF = 1	78	0F 88
JNS	Jump if not sign		SF = 0	79	0F 89
JE JZ	Jump if equal Jump if zero		ZF = 1	74	0F 84
JNE JNZ	Jump if not equal Jump if not zero		ZF = 0	75	0F 85
JB JNAE JC	Jump if below Jump if not above or equal Jump if carry	unsigned	CF = 1	72	0F 82
JNB JAE JNC	Jump if not below Jump if above or equal Jump if not carry	unsigned	CF = 0	73	0F 83

Conditional Jumps - mnemonics

Instruction	Description	signed-ness	Flags	Short jump opcodes	near jump opcodes
JBE JNA	Jump if below or equal Jump if not above	unsigned	CF = 1 or ZF = 1	76	0F 86
JA JNBE	Jump if above Jump if not below or equal	unsigned	CF = 0 and ZF = 0	77	0F 87
JL JNGE	Jump if less Jump if not greater or equal	signed	SF <> OF	7C	0F 8C
JGE JNL	Jump if greater or equal Jump if not less	signed	SF = OF or ZF = 1	7D	0F 8D
JLE JNG	Jump if less or equal Jump if not greater	signed	ZF = 1 or SF <> OF	7E	0F 8E
JG JNLE	Jump if greater Jump if not less or equal	signed	ZF = 0 and SF = OF	7F	0F 8F

Conditional Jumps - mnemonics

Instruction	Description	signed-ness	Flags	Short jump opcodes	near jump opcodes
JP JPE	Jump if parity Jump if parity even		PF = 1	7A	0F 8A
JNP JPO	Jump if not parity Jump if parity odd		PF = 0	7B	0F 8B
JCXZ JECXZ	Jump if CX register is 0 Jump if ECX register is 0		CX = 0 ECX = 0	E3	

Line# (jmp)	13	15
Complete Object Code(jmp)	7F 08	72 00
Complete Object Code(cmp/add)	3B 05 00000000	3B 05 00000000
Flag(s) Condition	ZF=0 and SF ≠ OF	cf=1
Jump? (Yes/No)	no	yes

Line#	13
Complete Object Code	7F 08
Op code	7F
Object code length (in byte)	2 bytes
Type	register short