

SHORT JMP vs. LONG JMP

Dinnou:

```
Mov eax, 89
```

```
.....
```

```
Jmp Maideparte ; JMP is not restricted to any "distance"
```

Resd 1000h: The distance between LOOP and the label Dinnou is > 127 bytes so it is not a short jump !

```
Maideparte:
```

```
Mov ebx, 17
```

```
.....
```

Loop Dinnou ; syntax error: short jump is out of range + warning: byte data exceeds bounds

If we replace **Loop Dinnou** with the equivalent

```
dec ecx
```

```
jnz Dinnou
```

we will NOT obtain an error anymore because

In TASM and MASM the short jump condition (ie maximum 127 bytes distance) is imposed both at the level of LOOP type instructions and at the level of conditional jump instructions.

In NASM the restriction is valid only for LOOP type instructions, the conditional jump instructions are no longer subject to this restriction.

Although, there is a very important difference between these 2 variants: Loop does NOT affect the flags, but DEC DOES that !!

If we need a similar effect without affecting the flags, we could do:

Dinnou:

```
Mov eax, 89
```

```
.....
```

```
Jmp Maideparte
```

Resd 1000h: The distance between LOOP and the label Dinnou is > 127 bytes so it is not a short jump !

```
MaiAproape:
```

```
Jmp Dinnou
```

```
Maideparte:
```

```
Mov ebx, 17
```

```
.....
```

Loop MaiAproape ; short jump