

**NAME**

compar – default comparison routine for qsort

**SYNOPSIS**

**jsr      pc,compar**

**DESCRIPTION**

*Compar* is the default comparison routine called by *qsort* and is separated out so that the user can supply his own comparison.

The routine is called with the width (in bytes) of an element in r3 and it compares byte-by-byte the element pointed to by r0 with the element pointed to by r4.

Return is via the condition codes, which are tested by the instructions ‘blt’ and ‘bgt’. That is, in the absence of overflow, the condition  $(r0) < (r4)$  should leave the Z-bit off and N-bit on while  $(r0) > (r4)$  should leave Z and N off. Still another way of putting it is that for elements of length 1 the instruction

cmpb    (r0),(r4)

suffices.

Only r0 is changed by the call.

**SEE ALSO**

qsort (III)

**BUGS**

It could be recoded to run faster.