NAME

ldiv – long division

SYNOPSIS

ldiv (hidividend, lodividend, divisor)

lrem (hidividend, lodividend, divisor)

DESCRIPTION

These routines are provided for compatibillity with existing programs only; the **long** C variable type should be used instead.

The concatenation of the signed 16-bit *hidividend* and the unsigned 16-bit *lodividend* is divided by *divisor*. The 16-bit signed quotient is returned by *ldiv* and the 16-bit signed remainder is returned by *lrem*. Divide check and erroneous results will occur unless the magnitude of the divisor is greater than that of the high-order dividend.

An integer division of an unsigned dividend by a signed divisor may be accomplished by:

quo = ldiv(0, dividend, divisor);

and similarly for the remainder operation.

Often both the quotient and the remainder are wanted. Therefore *ldiv* leaves a remainder in the external cell *ldivr*.

NOTE

These routines are obsolete and should not be used. Use **long** variable types instead.

BUGS

To reiterate, *ldiv* will not work if the magnitude of the divisor is less than the high order dividend. There is no check for this condition.