

NAME

`ldiv`, `lrem` – long division

SYNOPSIS

`ldiv(hidividend, lodividend, divisor)`

`lrem(hidividend, lodividend, divisor)`

DESCRIPTION

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*.

BUGS

No divide check check.