

NAME

TPVNML – Normalize a two-part value.

SYNOPSIS

CALL TPVNML(TPV,L)

TPV(2) is the INTEGER*4 two-part value to be normalized in-place

L is the INTEGER*4 number of small things in a big one

DESCRIPTION

The routine figures out how many big units are in the small units of TPV, then moves that multiple of L small units from TPV(2) to TPV(1) so that there are fewer than L small units left in TPV(2). Finally, it adjusts TPV(1) up or down by one unit and TPV(2) down or up by L units, if that is necessary in order for the two parts to have the same sign. The process works whatever signs the two parts have on input.

SEE ALSO

TPVADD, TPVSUB, TPVSCL, TPVMLT, TPVDIV, TPVMAX, TPV2R8, R82TPV.

LINKAGE

gfortran source.f -L\${HOME}/lib -lmisc

AUTHOR

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EXAMPLE

```

      INTEGER*4 TPV(2)/3,827/
      CALL TPVNML(TPV,12)
      WRITE(6,901) TPV
901  FORMAT(' [3,827]=[',I3,',',I3,',']')
      STOP
      END

```

This program finds that $3+827/12 = 71+11/12$, as shown by the output below.

```

unix[1] a.out
[3,827]=[ 71, 11]
unix[2]

```