

**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]
  
```