

NAME

DDOT – Return the dot (inner, scalar) product of two vectors.

SYNOPSIS

RESULT=DDOT(X,Y,N)

RESULT is the REAL*8 dot product returned
 X(N) is the REAL*8 first vector factor in the product
 Y(N) is the REAL*8 second vector factor in the product
 N is the INTEGER*4 number of elements in X and Y

DESCRIPTION

If $N \leq 0$ the routine returns the value zero.

If $N > 0$ it accumulates $\sum_{j=1}^N x_j y_j$ and returns the sum in DDOT.

SEE ALSO

A dot product routine is also included in the BLAS subroutine library.

LINKAGE

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

AUTHOR

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EXAMPLE

```
REAL*8 X(3)/1.D0,2.D0,3.D0/,PROD,DDOT
PROD=DDOT(X,X,3)
WRITE(6,901) PROD
901 FORMAT('X-transpose-X = ',F4.1)
STOP
END
```

This example produced the following output:

```
unix[1]
X-transpose-X = 14.0
unix[2]
```