

peval

Chebyshev/Legendre polynomial evaluation.

Syntax

PEVAL,ftype,ord,coef,n,result

Return Value

Peval evaluates a Chebyshev or Legendre polynomial. This routine's purpose is to support getchelle.pro. See the documentation for getchelle for more details.

Arguments

y1 - (float array) 1st array

ftype - (integer) = 1 (Chebyshev) = 2 (Legendre)

ord - (integer) order+1

coef - (real array) polynomial coefficients

n - (real array) normalized coords of the array (-1.:1.)

Keywords

none

Example

Evaluate the value of a Legendre polynomial with coefficients (0.1 2.0 3.0), at the abscisae (normalized -1 to 1) -1.0, 0.0 and 1.0

```
IDL> peval,2,3,[0.1, 2.0,3.0],[-1.0,0.0,1.0],wn
IDL> print,wn
1.1000000
0.10000000
5.1000000
```

Version History

C. Allende Prieto, McDonald Observatory, April 2007, written

Andrei Tokovinin, CTIO, September 2012, fixed a bug for the Legendre Polynomial evaluation.

See Also

<http://iraf.net/irafdocs/specwcs.php>