

trapz

Numerical integration using the composed trapezoidal rule.

Syntax

trapz(x,y)

Return Value

The result of the integral $\int_{\min(x)}^{\max(x)} y dx$, in double precision.

Arguments

x - (float array) abscissae

y - (float array) ordinates

Keywords

none

Example

Evaluate, numerically, the value of the integral $\int_0^1 x dx = 1/2$.

```
IDL>      x=dindgen(101)/100.d0
IDL>      y=x
IDL>      print,trapz(x,y)
0.50000000
```

Version History

C. Allende Prieto, Sep 1998

", March 2010, changed loop variable to long

See Also

http://en.wikipedia.org/wiki/Trapezoidal_rule