Examples

```
Function AllPermutations(num)
    Variable num

    Variable i,nf=factorial(num)
    Make/O/N=(num) wave0=p+1,waveA,waveB=p

    Print wave0
    for(i=0;i<nf;i+=1)
        waveA=wave0
        if(statsPermute(waveA,waveB,1)==0)
            break
        endif
        print waveA
    endfor
end
```

```
Executing AllPermutations(3) prints:
  wave0[0]= {1,2,3}
  waveA[0]= {1,3,2}
  waveA[0]= {2,1,3}
  waveA[0]= {2,3,1}
  waveA[0]= {3,1,2}
  waveA[0]= {3,2,1}
```

See Also

Chapter III-12, **Statistics** for a function and operation overview.

StatsPoissonCDF

StatsPoissonCDF(*x*, λ)

The StatsPoissonCDF function returns the Poisson cumulative distribution function

$$F(x;\lambda) = \sum_{i=0}^{x} \frac{\exp(-\lambda)\lambda^i}{i!}, \qquad x = 0,1,2...$$

See Also

Chapter III-12, **Statistics** for a function and operation overview; the **StatsPoissonPDF** and **StatsInvPoissonCDF** functions.

StatsPoissonPDF

StatsPoissonPDF(*x*, λ)

The StatsPoissonPDF function returns the Poisson probability distribution function

$$f(x;\lambda) = \frac{\exp(-\lambda)\lambda^x}{x!}, \qquad x = 0,1,2...$$

where λ is the shape parameter.

See Also

Chapter III-12, **Statistics** for a function and operation overview; the **StatsPoissonCDF** and **StatsInvPoissonCDF** functions.

StatsPowerCDF

StatsPowerCDF(*x*, *b*, *c*)

The StatsPowerCDF function returns the Power Function cumulative distribution function

$$F(x;b,c) = \left(\frac{x}{b}\right)^c$$

where the scale parameter b and the shape parameter c satisfy $b,c > 0$ and $b \geq x \geq 0$.