Subject: Re: lower and upper triangular matrices
Posted by Craig Markwardt on Thu, 30 May 2013 01:33:48 GMT
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On Wednesday, May 29, 2013 9:31:35 AM UTC-4, fd_...@mail.com wrote:
>
> Does anyone know how to create the lower and upper trianglular matrices of a given matrix A?

What do you mean? Do you want to factor a matrix, such as with CHOLDC? Or do you just want to extract the upper and lower triangle elements from a matrix?

CM

Subject: Re: lower and upper triangular matrices
Posted by fd_luni on Thu, 30 May 2013 10:05:16 GMT
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On Thursday, 30 May 2013 02:33:48 UTC+1, Craig Markwardt wrote:
> What do you mean? Do you want to factor a matrix, such as with CHOLDC? Or do you just want to extract the upper and lower triangle elements from a matrix?

I need the upper and lower triangle elements from a matrix. I am trying to use the Gauss-Seidel method.

Subject: Re: lower and upper triangular matrices
Posted by on Thu, 30 May 2013 10:51:20 GMT
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Den torsdagen den 30:e maj 2013 kl. 12:05:16 UTC+2 skrev fd_...@mail.com:
> On Thursday, 30 May 2013 02:33:48 UTC+1, Craig Markwardt wrote:
>
>> What do you mean? Do you want to factor a matrix, such as with CHOLDC? Or do you just want to extract the upper and lower triangle elements from a matrix?
>
> I need the upper and lower triangle elements from a matrix. I am trying to use the Gauss-Seidel method.

Like this?

```
IDL> n=4
IDL> a=indgen(n,n)+1
IDL> ii=indgen(n) # replicate(1,n)
IDL> jj=indgen(n) ## replicate(1,n)
IDL> print,a
      1       2       3       4
```

```
      5       6       7       8
      9      10      11      12
     13      14      15      16
IDL> print,a*(ii lt jj)
      0       0       0       0
      5       0       0       0
      9      10       0       0
     13      14      15       0
IDL> print,a*(ii ge jj)
      1       2       3       4
      0       6       7       8
      0       0      11      12
      0       0       0      16
```

Subject: Re: lower and upper triangular matrices
Posted by fd_luni on Thu, 30 May 2013 10:55:09 GMT
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Exactly, this is what I want.

Subject: Re: lower and upper triangular matrices
Posted by fd_luni on Thu, 30 May 2013 10:56:00 GMT
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Exactly, this is what I want.
