
Subject: Re: BEGINNER ASKS FOR HELP!!!

Posted by [Dr. G. Scott Lett](#) on Sat, 31 Jan 1998 08:00:00 GMT

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Edoardo "Dado" Marcora wrote:

> Dear Sirs,
>
> I've just started using IDL 5 and I would like to solve this problem I've
> encountered.
>
> I need to create a RANDOM square matrix that contains only three numbers 0,
> 1, and (-1). There are two constraints though. I would like to tell the
> program before it creates this matrix what the (at least approximate) RATIO
> of 1 / (-1) should be and HOW MANY (at least approximately) 1 and (-1)
> (total) are on each row of the matrix.
>
> For example, the input by the user would be:
>
> NUMBER OF ELEMENTS PER ROW e.g., 6
>
> RATIO OF 1 / (-1) e.g., 0.5 (at the level of the matrix not of the row)
>
> NUMBER OF 1 AND (-1) (total) IN EACH ROW e.g., 3 (for example 0 0 0 1 1 -1)
>
> I do not need the ratio and number of |1| per row to be exact, also an
> approximation it's good.
>
> Thanx for your help,
>
> Dado

Dear Dado,

This isn't the entire function you want, but it should help you write one.

```
A = randomu( seed, 6, 6 )
high = float( 3 ) / 6
low = high * 0.5
neg = where( A lt low, countLow )
pos = where( A ge low and A lt high, countHigh )
B = intarr( 6, 6 )
if countLow gt 0 then B[ neg ] = -1
if countHigh gt 0 then B[ pos ] = 1
```

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