
Subject: Re: Help needed!!

Posted by [Gray](#) on Fri, 16 Apr 2010 19:13:34 GMT

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On Apr 16, 2:06 pm, bala murugan <bala2...@gmail.com> wrote:

> On Apr 16, 11:48 am, "R.G. Stockwell" <noem...@please.com> wrote:

>

>

>

>

>

>> "bala murugan" <bala2...@gmail.com> wrote in message

>

>> news:29ee4ec6-4803-44fd-aa5c-00fc0d2c9376@u21g2000yqc.google groups.com...

>

>>> Hi people,

>

>>> I am new to IDL. This is my first program in IDL. Can somebody point

>>> out the errors in my code. I have been struggling to get it right.

>

>>> CODE:

>

>>> FUNCTION poissondist,fLambda,N

>>> r = RANDOMU(SEED,1)

>>> FOR j=1,N,1 DO BEGIN

>

>> arrays are indexed from 0... N-1

>

>>> x=poisson(j,fLambda)

>>> if (x EQ r) THEN a[i]=j

>

>> floating point numbers may never be exactly equal.

>> Use a "if abs(x-r) lt 0.0001 then" type of statement

>

>> as others have pointed out, 'a' and 'i' do not exist here.

>> i have no idea what you think "i" should be.

>> For a you will need to allocate an array inside that function, like so:

>> FUNCTION poissondist,fLambda,N

>> a = fltarr(N)

>> r = RANDOMU(SEED,1)

>> FOR j=0,N-1 DO BEGIN

>> etc....

>

>>> ENDFOR

>>> RETURN,a

>>> END

>

>>> In the above code, the function "poisson" was written by me. It is as

```

>>> follows,
>
>>> CODE:
>
>>> FUNCTION poisson,a,b
>>> x = (b^a)/(exp(b)*factorial(a))
>>> RETURN,x
>>> END
>
>> in the future, you may want to make sure a and b are passed in
>> before executing that statement. for example:
>
>> if n_elements(a) eq 0 then message,'missing a'
>> if n_elements(b) eq 0 then message,'missing b'
>
>> cheers,
>> bob
>
>> PS bonus info.
>
>> Make sure that the code for
>> FUNCTION poissondist,fLambda,N
>> is in a file called poissondist.pro, and that it is in your IDL path.
>
>> Also, make sure your function:
>> FUNCTION poisson,a,b
>> is in a file called poisson.pro, and that it is in your IDL path.
>
> Guys, thanks a lot for the info.
>
> Sorry, I made a mistake while copying the code and pasting it:
>
> CODE:
>
> FUNCTION poissondist,fLambda,N
> FOR i=1,N,1 DO BEGIN
>     a = FLTARR(N)
>     r = RANDOMU(SEED,1)
>     FOR j=1,N,1 DO BEGIN
>         x=poisson(j,fLambda)
>         if abs(x-r) lt 0.0001 THEN a[i]=j
>     ENDFOR
> ENDFOR
> RETURN,a
> END
>
> I also came across another method. But am not sure if it does the same
> thing as mentioned in the summary that I made.

```

>
> The thing that I came across is as follows,
>
> FUNCTION poissondist, fLambda, N
> data = RANDOMU(SEED,N,POISSON=fLambda)
> RETURN,data
> END
>
> Can you please clarify if the second method does the same thing as the
> first?
>
> Thanks,
> B

The second method does what you're looking for, the first may or may not but is overly complicated.
