Subject: Re: Help needed!!
Posted by bala murugan on Fri, 16 Apr 2010 18:06:52 GMT
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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