Subject: Re: Maximum index for arrays?
Posted by Chris[6] on Mon, 15 Sep 2008 08:53:26 GMT

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On Sep 14, 8:08 pm, "hotplainr...@gmail.com" <hotplainr...@gmail.com>
wrote:
> Hi guys,
>
> Thanks for helping me for the past few weeks. I've managed to get
> CUBLAS and other CUDA programs working in IDL. What I have now for you
> guys is this.
>
> Here is the code
>
> N = 181
> N2 = N^2
> a = fltarr(N2, 141)
> help,a
>
> A   FLOAT   = Array[32761, 141]
>
> N = 182
> N2 = N^2
> a = fltarr(N2, 141)
> % Array dimensions must be greater than 0
> % Execution halted at: TEST   5 /home/hpr/test.pro
> % $MAIN$
> IDL>
>
> How big can the index go? Its because I need N = 100 to 1000
>
> Regards
> Zaki

The problem is that the line
N = 182
sets N to a 16-bit signed integer (max size 32767-ish). When you
square it (33124), it overflows and becomes negative (-32412). Use
something like
N=182L (long integer with max size about 2 billion) or
N=2. (floating point)

As long as you have the RAM, arrays can have millions or billions (i
think) of elements, so you'll be fine.

chris

Subject: Re: Maximum index for arrays?
Posted by hotplainrice@gmail.co on Mon, 15 Sep 2008 10:15:07 GMT
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On Sep 15, 6:53 pm, Chris <beaum...@ifa.hawaii.edu> wrote:
> On Sep 14, 8:08 pm, "hotplainr...@gmail.com" <hotplainr...@gmail.com>
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> chris

Thanks chris, that resolved the problem.

Subject: Re: Maximum index for arrays?
Posted by pgrigis on Mon, 15 Sep 2008 13:38:08 GMT
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hotplainrice@gmail.com wrote:
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Just for the records, IDL 32-bit can have arrays with a maximum of
about
$2^{31}/N$ elements, where N is the size in byte of one element (i.e. 1
for bytes,
2 for int, 4 for long int and floats, etc. etc.).

On the orther hand, IDL 64 bits can (in principle) allocate arrays so
large that you won't be able to store them anyway (at least for the
next
few years or so)

Cheers,
Paolo

>
> Regards
> Zaki