
Subject: Bug in IDL or, may be in my head ?

Posted by [franciscoaiglesias](#) on Fri, 23 May 2014 08:01:30 GMT

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Hi all,

Any clue what's going on here ?

```
a = randomn(seed, 248, 256, 9972) * 100. + 4.e3
```

```
print, total(a) ; gives 1.42030e+12
```

```
print, total(a, /double) ;gives 2.5324144e+12
```

```
print, total(total(total(a, 1),1));gives 2.53250e+12
```

Thanks !

Subject: Re: Bug in IDL or, may be in my head ?

Posted by [Michael Galloy](#) on Fri, 23 May 2014 22:39:44 GMT

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On 5/23/14, 2:01 AM, franciscoaiglesias@gmail.com wrote:

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>

> Thanks !

>

Check out Kahan summation:

http://en.wikipedia.org/wiki/Kahan_summation_algorithm

I have an implementation in mglib:

```
IDL> print, mg_total(a)
```

```
% Loaded DLM: MG_ANALYSIS.
```

```
2.53241e+12
```

Get mglib at:

github.com/mgalloy/mglib

-Mike
