
Subject: Re: Specify the degree of accuracy of a floating point number
Posted by [David Fanning](#) on Thu, 22 Feb 2007 18:28:30 GMT
[View Forum Message](#) <> [Reply to Message](#)

Brian Larsen writes:

```
> Just to add more to the mix here:  
>  
> I use the solarsoft routine round_off.pro (I will put it inline as its  
> short) to do this, seems to work well and its already written, which I  
> always like.
```

To get this to work (I don't have the DATATYPE function), I changed this case statement:

```
> case datatype(num) of  
>   'BYT': x = byte(x)  
>   'INT': x = fix(x)  
>   'LON': x = long(x)  
>   'DOU': x = double(x)  
>   'FLO': x = float(x)  
> endcase
```

To this:

```
case Size(num, /TName) of  
  'BYTE': x = byte(x)  
  'INT': x = fix(x)  
  'LONG': x = long(x)  
  'DOUBLE': x = double(x)  
  'FLOAT': x = float(x)  
endcase
```

A pretty harmless change, it seems to me. Then I tried the program:

```
IDL> a = 432.49584738273845D  
IDL> print, round_off(a, 0.0000001)  
      2.9991178
```

Huh!? What did I do wrong?

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.

