Subject: Re: appending to column
Posted by Michael Galloy on Wed, 16 Jul 2008 16:17:25 GMT
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On Jul 16, 10:02 am, d.po...@gmail.com wrote:
> Folks
> I have a float array that first column is the integer part and second
> column is the decimal part of that number. How I can append this to
> column to get one column of that float number. For example:
>
> [123,456]------> 123.456
> ……. …….
> Thanks
> Cheers

Like this?

```
IDL> d = long(1000 * randomu(seed, 2, 10))
IDL> print, d
       895       528
        34       183
       877       169
       614       604
       205       789
       537       526
       413       360
       643       687
       360       881
       512       874
IDL> print, d[0, *] + d[1, *] / (10. ^ (long(alog10(d[1, *])) + 1))
     895.528
     34.1830
     877.169
     614.604
     205.789
     537.526
     413.360
     643.687
     360.881
     512.874
```

Mike
--
www.michaelgalloy.cm
Tech-X Corporation
Software Developer II

Subject: Re: appending to column
Posted by Spon on Wed, 16 Jul 2008 16:18:13 GMT
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On Jul 16, 5:02 pm, d.po...@gmail.com wrote:
> Folks
> I have a float array that first column is the integer part and second
> column is the decimal part of that number. How I can append this to
> column to get one column of that float number. For example:
>
> [123,456]------> 123.456
> …… ……
> Thanks
> Cheers

Well, assuming you have the same number of significant figures in each
element:

Values = Array[0,*] + Array[1,*]/1000.0

Regards,
Chris

Subject: Re: appending to column
Posted by R.G. Stockwell on Wed, 16 Jul 2008 16:20:49 GMT
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<d.poreh@gmail.com> wrote in message
news:c09c9b8a-35a7-41d7-9088-7bce01762053@x35g2000hsb.google groups.com...
Folks
I have a float array that first column is the integer part and second
column is the decimal part of that number. How I can append this to
column to get one column of that float number. For example:

[123,456]------> 123.456

Thanks
Cheers

Here is an example:

IDL> print,a
0 1
2 3
4 311

```
IDL> print,a[0,*] +
float(a[1,*])/10^strlen(strcompress(string(a[1,*]),/rem))
     0.100000
      2.30000
      4.31100
```

Cheers,
bob

Subject: Re: appending to column
Posted by David Fanning on Wed, 16 Jul 2008 16:30:29 GMT
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R.G. Stockwell writes:

> <d.poreh@gmail.com> wrote in message
> news:c09c9b8a-35a7-41d7-9088-7bce01762053@x35g2000hsb.google groups.com...
> Folks
> I have a float array that first column is the integer part and second
> column is the decimal part of that number. How I can append this to
> column to get one column of that float number. For example:
>
> [123,456]------> 123.456

> Thanks
> Cheers
>
>
> Here is an example:
>
>
> IDL> print,a
>   0   1
>   2   3
>   4   311
> IDL> print,a[0,*] +
> float(a[1,*])/10^strlen(strcompress(string(a[1,*]),/rem))
>   0.100000
>   2.30000
>   4.31100

Alright, these explanations don't exactly leap to mind for me.
Which math class was I suppose to learn this in? :-(

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: appending to column
Posted by d.poreh on Wed, 16 Jul 2008 16:43:15 GMT
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On Jul 16, 6:30 pm, David Fanning <n...@dfanning.com> wrote:
> R.G. Stockwell writes:
>> <d.po...@gmail.com> wrote in message
>> news:c09c9b8a-35a7-41d7-9088-7bce01762053@x35g2000hsb.google groups.com...
>> Folks
>> I have a float array that first column is the integer part and second
>> column is the decimal part of that number. How I can append this to
>> column to get one column of that float number. For example:
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>> [123,456]------> 123.456
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>> 0 1
>> 2 3
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>> IDL> print,a[0,*] +
>> float(a[1,*])/10^strlen(strcompress(string(a[1,*]),/rem))
>> 0.100000
>> 2.30000
>> 4.31100
>
> Alright, these explanations don't exactly leap to mind for me.
> Which math class was I suppose to learn this in? :-(
>
> Cheers,
>
> David
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/

> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

yes
thanks. I should also go more math class!:-)
Cheers
Dave

Subject: Re: appending to column
Posted by David Fanning on Wed, 16 Jul 2008 17:06:28 GMT
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mgalloy@gmail.com writes:

> print, d[0, *] + d[1, *] / (10. ^ (long(alog10(d[1, *])) + 1))

Duh! Ok, nice. I've put this in my power user's toolkit now.
Could come in handy some day for a couple of other things. :-)

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: appending to column
Posted by Jean H. on Wed, 16 Jul 2008 17:20:49 GMT
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>> IDL> print,a
>> 0 1
>> 2 3
>> 4 311
>> IDL> print,a[0,*] +
>> float(a[1,*])/10^strlen(strcompress(string(a[1,*]),/rem))
>> 0.100000
>> 2.30000
>> 4.31100
>
> Alright, these explanations don't exactly leap to mind for me.
> Which math class was I suppose to learn this in? :-(
>

> Cheers,
> David

division by 10, by 100 by 1000... hum.... too far back in time to
remember when we learn it! :)

1) get the number of digits for the decimal part
2) divide the decimals by 10 power to the number of digits(->
10,100,1000 etc) so that 0 <= result < 1.0
3) add it to the integer part

Jean

Subject: Re: appending to column
Posted by Jean H. on Wed, 16 Jul 2008 17:27:27 GMT
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> IDL> print,a
> 0 1
> 2 3
> 4 311
> IDL> print,a[0,*] +
> float(a[1,*])/10^strlen(strcompress(string(a[1,*]),/rem))
> 0.100000
> 2.30000
> 4.31100
>
>
> Cheers,
> bob

While using strings, we can make it more efficiently. There is no need
to do any division, get the length or anything:

IDL> help, 1 + float('0.'+strtrim(234,2))
<Expression> FLOAT = 1.23400

Jean

Subject: Re: appending to column
Posted by R.G. Stockwell on Wed, 16 Jul 2008 23:17:39 GMT
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"David Fanning" <news@dfanning.com> wrote in message
news:MPG.22e7d00f5c02361998a3f0@news.frii.com...

...
>> IDL> print,a
>> 0 1
>> 2 3
>> 4 311
>> IDL> print,a[0,*] +
>> float(a[1,*])/10^strlen(strcompress(string(a[1,*]),/rem))
>> 0.100000
>> 2.30000
>> 4.31100
>
> Alright, these explanations don't exactly leap to mind for me.
> Which math class was I suppose to learn this in? :-(

lol, sorry. I replied with a quick answer, then at the last second changed the post to handle an arbitrary length of digits. For some reason, counting the number digits jumped into my mind first, and apparently I have found the least best algorithm for solving this particular problem. Is there a prize for most obsfucated solution?

Cheers,
bob

PS changing a post at the last second is always a bad idea.
PPS 'least best' sounds better than 'worst', imho.
