Subject: Re: Write a vector into a file
Posted by David Fanning on Tue, 09 Nov 2010 01:21:34 GMT

sravani vaddi writes:

> Can somebody let me know how to write a vector into a file, and the
> file should contain data only in one column
> When i used the following code, it prints in some 4 x 3 matrix form.
>
> openw, 1, 'jobs.csv'
> printf, 1, jobs
> close, 1

Well, if "jobs" is some 4x3 matrixy thing, I'd
say IDL was just doing its job. :-)

Cheers,

David

P.S. It *is* a 4x3 matrixy thing, isn't it?

--
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: Write a vector into a file
Posted by jeanh on Tue, 09 Nov 2010 01:24:06 GMT

On 08/11/2010 8:18 PM, sravani vaddi wrote:
> Hi,
> Can somebody let me know how to write a vector into a file, and the
> file should contain data only in one column
> When i used the following code, it prints in some 4 x 3 matrix form.
>
> openw, 1, 'jobs.csv'
> printf, 1, jobs
> close, 1
>
> Thanks,
> Sravani
  Hi

try the format keyword:
printf, 1, jobs, format = '(A)'

Jean

Subject: Re: Write a vector into a file
Posted by David Fanning on Tue, 09 Nov 2010 01:56:26 GMT
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jeanh writes:

> try the format keyword:
> printf, 1, jobs, format = '(A)'

Alright, Jean, you are going to have to explain this one
to us. :-)

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
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Subject: Re: Write a vector into a file
Posted by penteado on Tue, 09 Nov 2010 02:08:39 GMT
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On Nov 8, 11:56 pm, David Fanning <n...@dfanning.com> wrote:
> jeanh writes:
>> try the format keyword:
>> printf, 1, jobs, format = '(A)'
>
> Alright, Jean, you are going to have to explain this one
> to us. :-)

At this point we do not even know the vector's type or shape. So that
is not a bad guess, as it will try to stringify the vector's elements,
one per output line.

Subject: Re: Write a vector into a file
Posted by jeanh on Tue, 09 Nov 2010 14:30:54 GMT

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On 08/11/2010 9:08 PM, Paulo Penteado wrote:
> On Nov 8, 11:56 pm, David Fanning<n...@dfanning.com> wrote:
>> jeanh writes:
>>> try the format keyword:
>>> printf, 1, jobs, format = '(A)'
>>
>> Alright, Jean, you are going to have to explain this one
>> to us. :-)
>
> At this point we do not even know the vector's type or shape. So that
> is not a bad guess, as it will try to stringify the vector's elements,
> one per output line.

Thanks Paulo,

It does work as you say for various arrays (what is a vector according
to the OP by the way??). I tried with a 4*3 float array and it does
print it 1 entry per line, as required!

Jean

Subject: Re: Write a vector into a file
Posted by David Fanning on Tue, 09 Nov 2010 14:37:02 GMT

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jeanh writes:

> It does work as you say for various arrays (what is a vector according
> to the OP by the way??). I tried with a 4*3 float array and it does
> print it 1 entry per line, as required!

Yes, it is that exclamation mark at the end of your
sentence that I am interested in. :-)

Cheers,

David

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

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Subject: Re: Write a vector into a file
Posted by David Fanning on Tue, 09 Nov 2010 15:07:44 GMT
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jeanh writes:

> try the format keyword:
> printf, 1, jobs, format = '(A)'

Well, it's a neat solution, I'll give you that!

But I think it works for the wrong reasons, and
I think there is a danger, especially if the data
is not all of the same magnitude, that what ends
up in the file is not exactly what you *expect*
will end up in the file.

Much better, it seems to me, to do this correctly
so that the precision of the data is maintained
in the way you specify. Of course, we can't do
this "correctly" since the end user hasn't told
us anything about his data. It may be he is
content with solutions that just look like they
work. Many people are. :-)

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
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Subject: Re: Write a vector into a file
Posted by penteado on Tue, 09 Nov 2010 15:18:28 GMT
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On Nov 9, 1:07 pm, David Fanning <n...@dfanning.com> wrote:

> But I think it works for the wrong reasons, and
> I think there is a danger, especially if the data
> is not all of the same magnitude, that what ends
> up in the file is not exactly what you *expect*
> will end up in the file.

I agree. That way is relying on IDL's guess of how to make a string out of the array, which is just intended to be a handy default (and most often used interactively for the console). But since we do not know what is getting written (might not even be numbers), that is a neat generic trick.

> Much better, it seems to me, to do this correctly
> so that the precision of the data is maintained
> in the way you specify. Of course, we can't do
> this "correctly" since the end user hasn't told
> us anything about his data. It may be he is
> content with solutions that just look like they
> work. Many people are. :-)

That is a common problem. Too many are content with always using text files, as if none of the binary formats existed or ever were useful.

Subject: Re: Write a vector into a file
Posted by pgrigis on Tue, 09 Nov 2010 15:36:20 GMT

On Nov 9, 10:18 am, Paulo Penteado <pp.pente...@gmail.com> wrote:
> On Nov 9, 1:07 pm, David Fanning <n...@dfanning.com> wrote:
>
>> But I think it works for the wrong reasons, and
>> I think there is a danger, especially if the data
>> is not all of the same magnitude, that what ends
>> up in the file is not exactly what you *expect*
>> will end up in the file.
>
> I agree. That way is relying on IDL's guess of how to make a string
> out of the array, which is just intended to be a handy default (and
> most often used interactively for the console). But since we do not
> know what is getting written (might not even be numbers), that is a
> neat generic trick.
>
>> Much better, it seems to me, to do this correctly
>> so that the precision of the data is maintained
>> in the way you specify. Of course, we can't do
>> this "correctly" since the end user hasn't told
>> us anything about his data. It may be he is

>> content with solutions that just look like they
>> work. Many people are. :-)
>
> That is a common problem. Too many are content with always using text
> files, as if none of the binary formats existed or ever were useful.

On the other hand, text format most likely can be read by anyone
in any situations. 20 years down the line a binary format may be
so obsolete that nobody can read it anymore...

Ciao,
Paolo

Subject: Re: Write a vector into a file
Posted by penteado on Tue, 09 Nov 2010 15:41:49 GMT
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On Nov 9, 1:36 pm, Paolo <pgri...@gmail.com> wrote:
> On the other hand, text format most likely can be read by anyone
> in any situations. 20 years down the line a binary format may be
> so obsolete that nobody can read it anymore...

On another hand, many text files cannot be read next week, by their
own author, because they are a mess. Or even if read, are causing lost
precision, or just too much work.

By the way, I was not saying text files are never good. Just that they
are not always good, as many users assume without even thinking about
it.

Subject: Re: Write a vector into a file
Posted by Gray on Tue, 09 Nov 2010 17:01:41 GMT
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On Nov 9, 10:41 am, Paulo Penteado <pp.pente...@gmail.com> wrote:
> On Nov 9, 1:36 pm, Paolo <pgri...@gmail.com> wrote:
>
>> On the other hand, text format most likely can be read by anyone
>> in any situations. 20 years down the line a binary format may be
>> so obsolete that nobody can read it anymore...
>
> On another hand, many text files cannot be read next week, by their
> own author, because they are a mess. Or even if read, are causing lost
> precision, or just too much work.
>

> By the way, I was not saying text files are never good. Just that they
> are not always good, as many users assume without even thinking about
> it.

This is why I write all of my data as FITS ascii tables. For
everything. It will always work!

Just kidding.

Subject: Re: Write a vector into a file
Posted by MC on Fri, 12 Nov 2010 02:18:13 GMT
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On Nov 10, 3:37 am, David Fanning <n...@dfanning.com> wrote:
> jeanh writes:
>> It does work as you say for various arrays (what is a vector according
>> to the OP by the way??). I tried with a 4*3 float array and it does
>> print it 1 entry per line, as required!
>
> Yes, it is that exclamation mark at the end of your
> sentence that I am interested in. :-)
>
> Cheers,
>
> David

Note also the file extension ".csv" which I would think implies commas
between the thingy variables so you could get more than one value per
line...

Cheers

Subject: Re: Write a vector into a file
Posted by MC on Fri, 12 Nov 2010 02:20:35 GMT
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On Nov 10, 4:36 am, Paolo <pgri...@gmail.com> wrote:
> On Nov 9, 10:18 am, Paulo Penteado <pp.pente...@gmail.com> wrote:
>
>
>
>
>
>
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>

>
>
>> On Nov 9, 1:07 pm, David Fanning <n...@dfanning.com> wrote:
>
>>> But I think it works for the wrong reasons, and
>>> I think there is a danger, especially if the data
>>> is not all of the same magnitude, that what ends
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>> out of the array, which is just intended to be a handy default (and
>> most often used interactively for the console). But since we do not
>> know what is getting written (might not even be numbers), that is a
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>
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>>> so that the precision of the data is maintained
>>> in the way you specify. Of course, we can't do
>>> this "correctly" since the end user hasn't told
>>> us anything about his data. It may be he is
>>> content with solutions that just look like they
>>> work. Many people are. :-)
>
>> That is a common problem. Too many are content with always using text
>> files, as if none of the binary formats existed or ever were useful.
>
> On the other hand, text format most likely can be read by anyone
> in any situations. 20 years down the line a binary format may be
> so obsolete that nobody can read it anymore...
>

You don't need 20 years just look at the evolution of (say) HDF or big
endian vs little endian!

Cheers