



# Enough really good SAS<sup>®</sup> tips to fill a book

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[myqna.org](http://myqna.org)



# SAS users have a number of resources available

- [support.sas.com](http://support.sas.com)
- [www.sasCommunity.org](http://www.sasCommunity.org)
- [support.sas.com/forums](http://support.sas.com/forums)
- [www.listserv.uga.edu/cgi-bin/wa?A0=sas-l](http://www.listserv.uga.edu/cgi-bin/wa?A0=sas-l)
  - been around since 1986
  - like a very large email inbox
  - user owned and controlled
  - large (almost 368,000 posts)
  - popular (36,788 distinct email addresses)
  - searchable

**sas-l posts, like any emails, contain:**

**Date: Tuesday, April 5, 2011, 3:21 pm**

**From: art297@netscape.net**

**Subject: Chance to make SAS-L history**

a message, of any length, that probably contains a question, an answer, a suggestion, a comment, an explanation and/or an opinion

and, like any set of emails,  
a post and all of its responses comprise a thread

**Date: Tuesday, April 5, 2011, 3:22 pm**

**From: art297@netscape.net**

**Subject: Re: Chance to make SAS-L history**

a message, of any length, that probably  
contains a question, an answer, a suggestion,  
a comment, an explanation and/or an opinion

SAS-L archives -- November 2006, week 1 (#205) - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites RSS Print Mail ICA

Address <http://www.listserv.uga.edu/cgi-bin/wa?A2=ind0611A&L=sas-l&P=R14135&D=1&H=0&O=D&T=1> Go Links



# www.listserv.uga.edu

The University of Georgia

Home | Browse | Manage | Request | Manuals | Register

Navigation icons: back, forward, search, refresh, etc.

**Date:** Thu, 2 Nov 2006 13:17:55 -0500  
**Reply-To:** Michael Raithel <michaelraithel@WESTAT.COM>  
**Sender:** "SAS(r) Discussion" <SAS-L@LISTSERV.UGA.EDU>  
**From:** Michael Raithel <michaelraithel@WESTAT.COM>  
**Subject:** OT: Chance to Make SAS-L History: Did You Know That...  
**Content-Type:** text/plain; charset="US-ASCII"

Dear SAS-L-ers,

This is a chance to make SAS-L history. We have never posted before. Everybody knows SOMETHING about SAS. So, pick your best tip and post it. Others already have tips. So, here is a tip and follow it up. It's easier, could it?

Okay, so I'll get the ball rolling. Here goes:

Join me in making this the longest thread that has ever existed on SAS-L

Pick your best tip and post it

**Achieved its goal (470 posts to date)**



**Tips lost amongst the other 368,000 posts**  
**Searching SAS-L by thread limited to one week**  
**Subject doesn't describe tip**  
**Almost half of the posts aren't tips**

# you can find all 250+ tips at:

link to download the index as an Excel file

Links to...  
The date each tip was posted  
Category

Link	Date	Subject	Category
<a href="#">219905</a>	3-Nov-2006	you can increase the page size of SAS indexes when they are first created by using the IBUFSIZE option?	Useful to know
<a href="#">219910</a>	3-Nov-2006	title statement options that were originally supported only in SAS/GRAPH to support changing the height	Useful to know
<a href="#">219918</a>	3-Nov-2006	Current SAS/GRAPH options that were originally supported only in SAS/GRAPH to support changing the height	Call Execute
<a href="#">219920</a>	3-Nov-2006	Did you know you can use	SQL
<a href="#">219922</a>	3-Nov-2006	Always use Call SymputX over Call Symput when you can	Functions
<a href="#">219924</a>	3-Nov-2006	You can refer to a list of variables, either if they are consecutive in PDV or named consecutively such as VAR1, VAR2 ..., VAR25 by using a dash	Useful to know
<a href="#">219926</a>	3-Nov-2006	Missing is less than everything.	Missing Values

[http://www.sascommunity.org/wiki/Index\\_to\\_SAS-L\\_Chance\\_to\\_Make\\_SAS-L\\_History\\_Posts](http://www.sascommunity.org/wiki/Index_to_SAS-L_Chance_to_Make_SAS-L_History_Posts)

**this is definitely NOT the first collection of tips**

- **Phil Mason posted daily tips on SAS-L in 1994**
- **followed by publishing two editions of *SAS tips and techniques from around the globe***
- **tips can also be found at:**
  - [www.sconsig.com](http://www.sconsig.com)***
  - [www.datasavantconsuling.com](http://www.datasavantconsuling.com)***
  - [blogs.sas.com/sasdummys](http://blogs.sas.com/sasdummys)***
  - [www.creative-wisdom.com](http://www.creative-wisdom.com)***
  - [www.lexjansen.com](http://www.lexjansen.com)*****and probably at many other sites I'm not aware of**

Can we ~~Ever get enough tips?~~

# A Google Search for: make sas-l history

Web Images Videos Maps News Books Gmail more ▼

atabachneck@gmail.com | Settings ▼ | Sign out



make sas-l history



Search

Instant is on ▼

About 306,000 results (0.25 seconds)

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 Images

 Videos

 News

 Discussions

 More

Markham, ON

Change location

The web

[Index to SAS-L Chance to \*\*Make SAS-L History\*\* Posts - sasCommunity](#) ☆ 🔍

Index to SAS-L Chance to **Make SAS-L History** Posts ... In 2006, Michael Raithel challenged SAS-L members to become part of a thread that was intended to be ...

[www.sascommunity.org/.../Index\\_to\\_SAS-L\\_Chance\\_to\\_Make\\_SAS-L\\_History\\_Posts](http://www.sascommunity.org/.../Index_to_SAS-L_Chance_to_Make_SAS-L_History_Posts) - Cached

[Re: Chance to \*\*Make SAS-L History\*\*. Did You Know That...](#) ☆ 🔍

4 posts - 2 authors - Last post: 2 Oct 2009

Re: Chance to **Make SAS-L History**: Did You Know That. .... ed to examine the log to make sure all is okay. And, isn't that a good ru= ...

[www.mathkb.com/.../sas/.../Re-Chance-to-Make-SAS-L-History-Did-You-Know-That](http://www.mathkb.com/.../sas/.../Re-Chance-to-Make-SAS-L-History-Did-You-Know-That) - Cached

[RES: OT: Chance to \*\*Make SAS-L History\*\*: Did You Know That...](#) - 15 Jul 2008

[Re: OT: Chance to \*\*Make SAS-L History\*\*: Did You Know That...](#) - 14 Aug 2007

[More results from mathkb.com >](#)

# Chance to Make SAS-L History

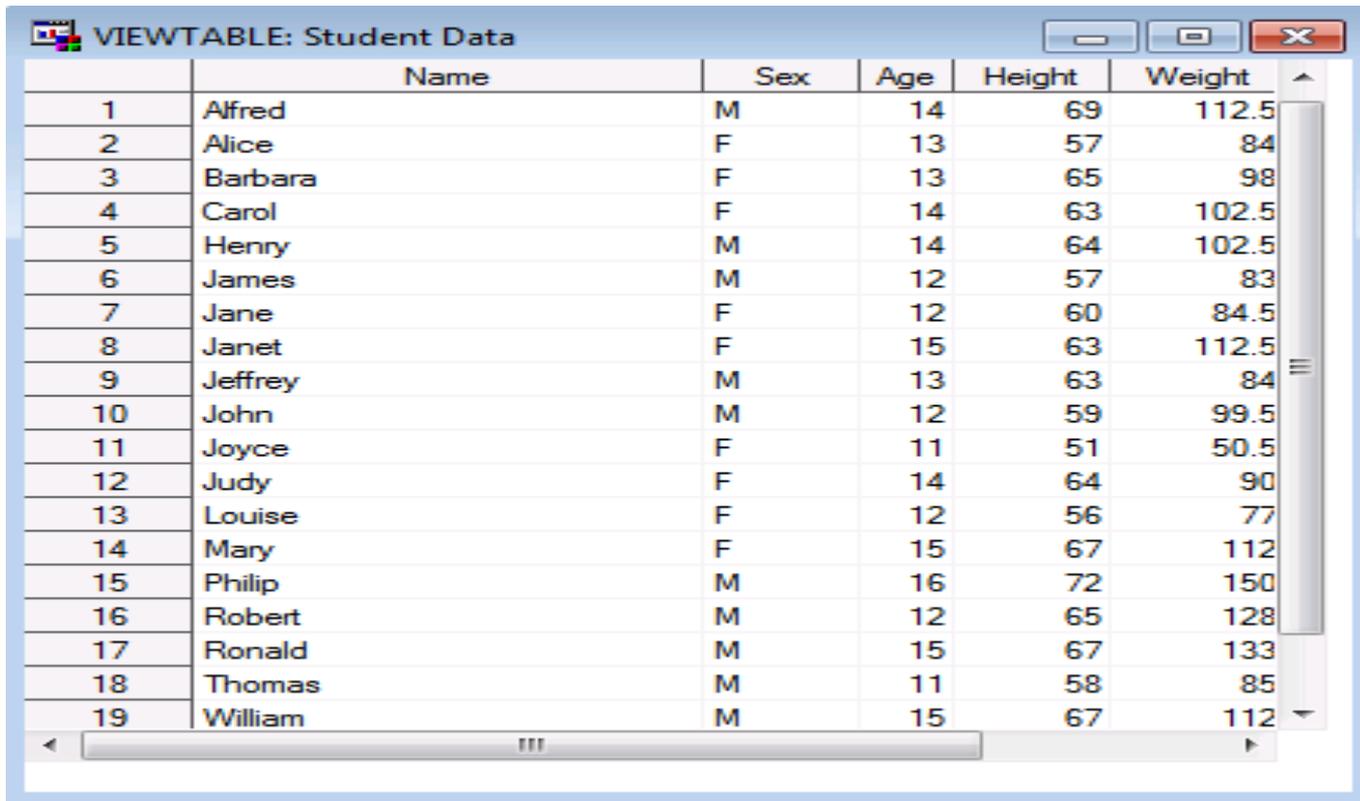
**My 5 favorites of the more than  
250 tips that were posted**

# A Simple Application of the Hash Method

**Have you ever needed to split a dataset into multiple files based on the various levels represented by one of the variables?**

# A Simple Application of the Hash Method

for example, given sashelp.class



VIEWTABLE: Student Data

	Name	Sex	Age	Height	Weight
1	Alfred	M	14	69	112.5
2	Alice	F	13	57	84
3	Barbara	F	13	65	98
4	Carol	F	14	63	102.5
5	Henry	M	14	64	102.5
6	James	M	12	57	83
7	Jane	F	12	60	84.5
8	Janet	F	15	63	112.5
9	Jeffrey	M	13	63	84
10	John	M	12	59	99.5
11	Joyce	F	11	51	50.5
12	Judy	F	14	64	90
13	Louise	F	12	56	77
14	Mary	F	15	67	112
15	Philip	M	16	72	150
16	Robert	M	12	65	128
17	Ronald	M	15	67	133
18	Thomas	M	11	58	85
19	William	M	15	67	112

# A Simple Application of the Hash Method

and you need to create separate files for each sex

VIEWTABLE: Work.F

	Sex	Name	Age	Height
1	F	Barbara	13	65.3
2	F	Janet	15	62.5
3	F	Alice	13	56.5
4	F	Mary	15	66.5
5	F	Carol	14	62.8
6	F	Judy	14	64.3
7	F	Jane	12	59.8
8	F	Joyce	11	51.3
9	F	Louise	12	56.3

+

VIEWTABLE: Work.M

	Sex	Name	Age	Height
1	M	Henry	14	63.5
2	M	John	12	59
3	M	Alfred	14	69
4	M	Thomas	11	57.5
5	M	James	12	57.3
6	M	Robert	12	64.8
7	M	Jeffrey	13	62.5
8	M	William	15	66.5
9	M	Philip	16	72
10	M	Ronald	15	67

# A Simple Application of the Hash Method

create an indexed copy of the file

```
data temp (index = (sex));  
  set sashelp.class;  
run;
```

# A Simple Application of the Hash Method

## declare a hash in a datastep to split the file

```
data _null_;  
  dcl hash hh ( );  
  hh.definekey ('k' );  
  hh.definedata ('sex','name','age','height');  
  hh.definedone ();  
  do k = 1 by 1 until (last.sex);  
    set temp;  
    by sex;  
    hh.add ();  
  end;  
  hh.output (dataset: sex);  
run;
```

# Have you ever seen an old-style macro?

**macro p;**

**proc print;**

**run;**

**%**

(they still work!)

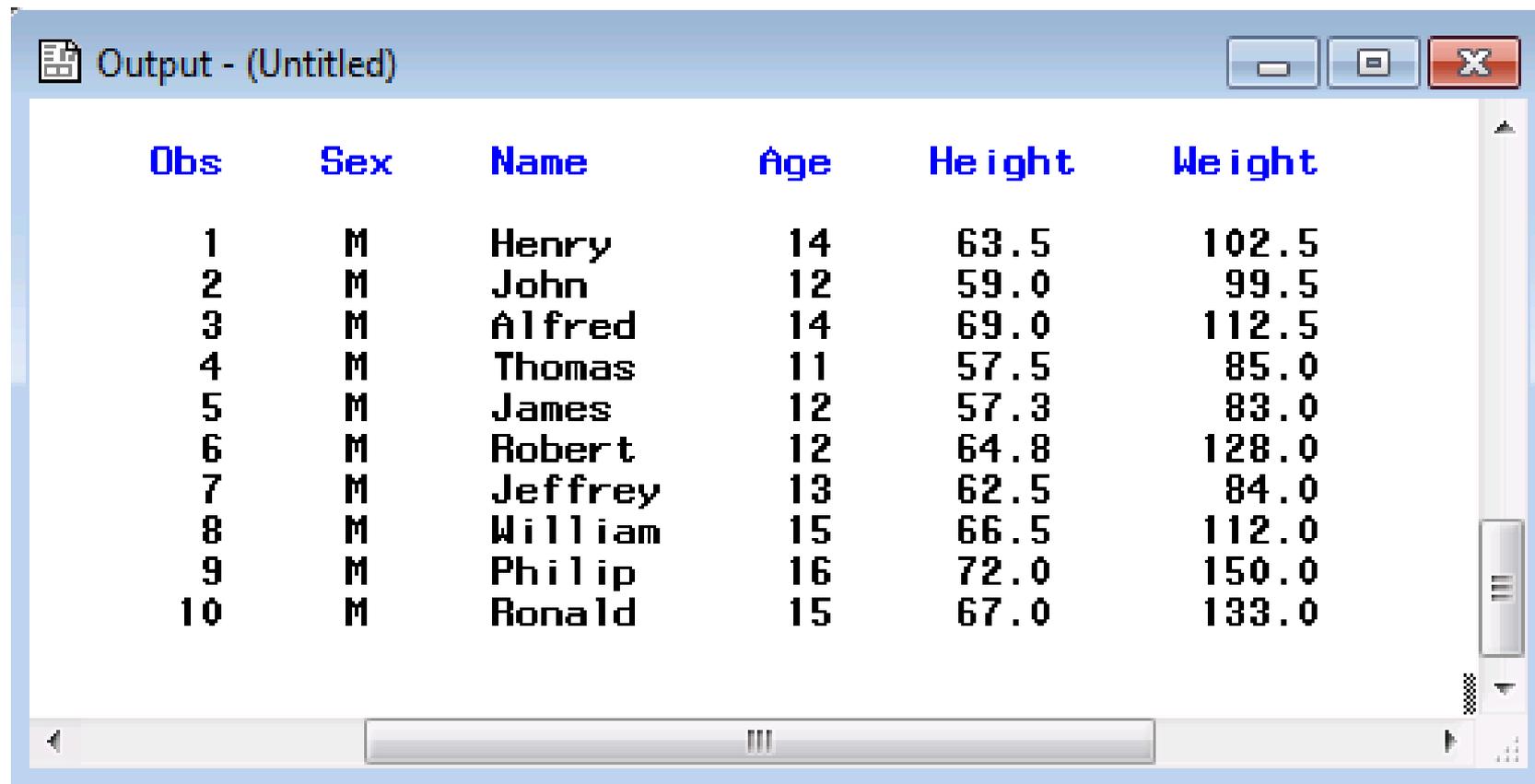
# Old Style Macros

following the last example, running the program (?) below:

**p**

# Old Style Macros

will produce:



Obs	Sex	Name	Age	Height	Weight
1	M	Henry	14	63.5	102.5
2	M	John	12	59.0	99.5
3	M	Alfred	14	69.0	112.5
4	M	Thomas	11	57.5	85.0
5	M	James	12	57.3	83.0
6	M	Robert	12	64.8	128.0
7	M	Jeffrey	13	62.5	84.0
8	M	William	15	66.5	112.0
9	M	Philip	16	72.0	150.0
10	M	Ronald	15	67.0	133.0

# Have you ever wanted your computer to let you know that a job has finished?

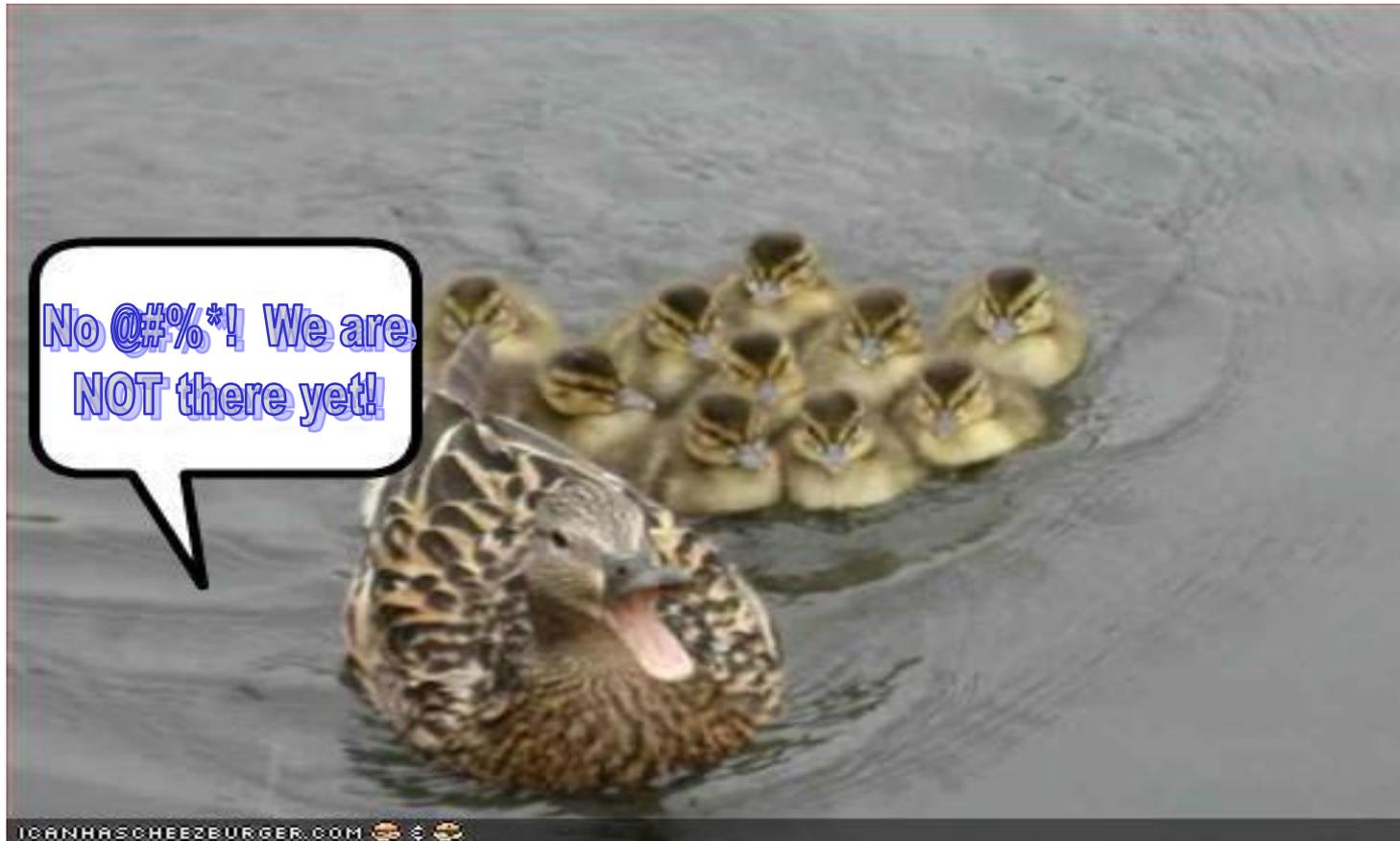


photo courtesy of [cheezburger.com](http://cheezburger.com)

# Are we there yet?

have your computer text your cell phone

```
FILENAME mail EMAIL
```

```
5555551234@mobile.mycingular.net
```

```
SUBJECT="A message from SAS";
```

```
data _null_;
```

```
file mail;
```

```
PUT "Your job finished!
```

```
Go have a nice weekend.";
```

```
PUT "!EM_SEND!";
```

```
run;
```

# Are we there yet?

Of course this may not work with all cell phones



photo by daryl sng see: <http://creativecommons.org/licenses/by-nc-nd/2.0/> for usage rights

Did you know that proc summary can transpose data?  
suppose you had the following file:

```
data have;  
  input memberID IC charge;  
  cards;  
1 301 5207  
1 301 .  
1 . 6082  
2 473 5207  
2 473 5207  
2 301 6082  
3 325 6082  
3 473 5207  
4 473 94  
4 352 94  
;
```

and you needed the following file

**data need;**

**input memberID IC\_1-IC\_3**

**charge1-charge3;**

**cards ;**

**1 301 301 . 5207 . 6082**

**2 473 473 301 5207 5207 6082**

**3 325 473 . 6082 5207 .**

**4 473 352 . 94 94 .**

**;**

using proc summary makes it easy\*:

```
proc summary nway data=have missing;  
  class memberID;  
  output out=want (drop=_)  
             idgroup(out[3](ic charge)=);  
run;
```

\*see: <http://www.lexjansen.com/pharmasug/2009/tt/tt08.pdf> for details

# suppose you had the following file

```
options caps;  
filename temp temp;  
data _null_;  
  file temp;  
  informat sentence $100.;  
  input sentence &;  
  put sentence;  
  cards;
```

Let's see if sas spell procedure can be used to verify whether the separate words in this, uhm, flie are, uhm, valid against a standard internal dictionary and let's see how versatile it is

```
;
```

and you needed to find:

- **how often each word was used**
- **which words were misspelled**
- **suggestions for correcting the errors**

to find word frequency just run:

```
proc spell  
  in=temp  
  nomaster;  
run;
```

to find misspellings run:

```
proc spell  
  in=temp  
  verify;  
run;
```

to get suggestions for misspellings run:

```
proc spell  
  in=temp  
  suggest;  
run;
```

however, in the current example, one of the suggestions will be:

<u>unrecognized word</u>	<u>Freq</u>	<u>Line(s)</u>	<u>Suggestions:</u>
<u>SAS</u>	1	1	<u>SAP</u>

which might explain why the proc is no longer documented!



## 2011 Las Vegas Nevada

Your comments and questions are valued and encouraged.

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