

PROC FORMS

The FORMS procedure produces labels for envelopes, mailing labels, external tape labels, file cards, and any other printer forms that have a regular pattern.

We should write at least one LINE statement.

Syntax:-

PROC FORMS <option(s)>;

BY <DESCENDING> variable-1<...<DESCENDING> variable-n> <NOTSORTED>;

FREQ variable;

LINE line-number variable(s) </ option(s)>;

Options:-

DATA=Specify the input data set.

FILE=Identify an external file for PROC FORMS to write to file location.

Control the dimensions of a form

LINES=Specify the number of lines in the form unit.

WIDTH=Specify the number of columns across the form unit.

Control the placement of the forms

ACROSS=Specify the number of form units to print across the page.

BETWEEN=Specify the number of spaces to print between form units.

DOWN=Specify the number of lines to skip on a page before printing the first form unit.

INDENT=Specify the number of spaces to indent before printing the first form unit in each row.

NDOWN=Specify the number of form units to print down the page.

PAGESIZE=Specify the number of lines on a page of forms.

SKIP=Specify the number of lines to skip between form units.

Control the number of each form unit that PROC FORMS prints

COPIES=Specify the number of form units to produce for each observation in each set of form units

SETS=Specify the number of sets of form units to produce.

CC Control the placement of page-eject characters

ALIGN=Specify the number of lines of dummy form units to print

Examples:-

Options Pagesize=**60** Linesize=**64** nodate pageno=**1**;

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.txt';

Proc forms data=sashelp.class(obs=**10**) file=labels align=**0**;

Line **1** name;

Line **2** sex;

Line **3** age;

Line **4** height;

Line **5** weight;

Run;

WIDTH=Specify the number of columns across the form unit. (Range 1-255)

Options Pagesize=**60** Linesize=**64** nodate pageno=**1**;

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.txt';

Proc forms data=sashelp.class(obs=**10**) file=labels align=**0** width=**15**;

Line **1** name;

Line **2** sex;

Line **3** age;

Line **4** height;

Line **5** weight;

Run;

ACROSS=Specify the number of form units to print across the page. (Range 1-200)

Options Pagesize=**60** Linesize=**64** nodate pageno=**1**;

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=sashelp.class(obs=**12**) file=labels align=**0** width=**15** across=**4**;

Line **1** name;

Line **2** sex;

Line **3** ages;

Line **4** height;

Line **5** weight;

Run;

BETWEEN=Specify the number of spaces to print between form units. (Range 1-200)

Options Pagesize=**60** Linesize=**64** nodate pageno=**1**;

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=sashelp.class(obs=**12**) file=labels align=**0** width=**15** across=**2** between=**10**;

Line **1** name;

Line **2** sex;

Line **3** age;

Line **4** height;

Line **5** weight;

Run;

DOWN=Specify the number of lines to skip on a page before printing the first form unit.

Options Pagesize=**60** Linesize=**64** nodate pageno=**1**; (Range 1-200)

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=sashelp.class(obs=**12**) file=labels align=**0** width=**15**
across=**2** between=**10** down=**5**;

Line **1** name;

Line **2** sex;

Line **3** age;

Line **4** height;

Line **5** weight;

Run;

NDOWN=Specify the number of form units to print down the page.

Options Pagesize=**60** Linesize=**64** nodate;

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=sashelp.class file=labels **ndown=4**;

Line **1** name;

Line **2** sex;

Line **3** age;

Line **4** height;

Line **5** weight;

Run;

PAGESIZE=Specify the number of lines on a page of forms

Options Pagesize=**60** Linesize=**64** nodate;

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=sashelp.class(obs=**12**) file=labels **pagesize=5**;

Line **1** name;

Line **2** sex;

Line **3** age;

Line **4** height;

Line **5** weight;

Run;

SKIP=Specify the number of lines to skip between form units (Range 1-200)

Options Pagesize=**60** Linesize=**64** nodate pageno=**1**;

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=sashelp.class(obs=**12**) file=labels align=**2** skip=**5**;

Line **1** name;

Line **2** sex;

Line **3** age;

Line **4** height;

Line **5** weight;

Run;

COPIES=Specify the number of form units to produce for each observation in each set of form units

Options Pagesize=**60** Linesize=**64** nodate pageno=**1**;

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=sashelp.class(obs=**12**) file=labels align=**0** width=**15**

across=**2** between=**10** copies=**3**;

Line **1** name;

Line **2** sex;

Line **3** age;

Line **4** height;

Line **5** weight;

Run;

SETS=Specify the number of sets of form units to produce.

Options Pagesize=60 Linesize=64 nodate pageno=1;

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=sashelp.class(obs=12) file=labels align=0 width=15
across=2 between=10 sets=4;

Line 1 name;

Line 2 sex;

Line 3 age;

Line 4 height;

Line 5 weight;

Run;

ALIGN=Specify the number of lines of dummy form units to print.

Options Pagesize=60 Linesize=64 nodate pageno=1;

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=sashelp.class(obs=12) file=labels align=2;

Line 1 name;

Line 2 sex;

Line 3 age;

Line 4 height;

Line 5 weight;

Run;

By Statement

Species the variable that the procedure uses to form BY groups. You can specify more than one variable. If you do not use the NOTSORTED option in the BY statement, then either the observations in the data set must be sorted by all the variables that you specify, or they must be indexed appropriately.

Data ds;

Set sashelp.class;

Run;

Proc sort data=ds;

By sex;

Run;

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=ds file=labels;

Line 1 name;

Line 2 sex;

Line 3 age;

Line 4 height;

Line 5 weight;

By sex;

Run;

```
Proc sort data=ds;  
By descending age;  
Run;  
Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';  
Proc forms data=ds file=labels;  
Line 1 name;  
Line 2 sex;  
Line 3 age;  
Line 4 height;  
Line 5 weight;  
By descending age;  
Run;
```

Notsorted – Without sorting data we can use by variables.

```
Options Pagesize=60 Linesize=64 nodate;  
Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';  
Proc forms data=sashelp.class file=labels;  
Line 1 name;  
Line 2 sex;  
Line 3 age;  
Line 4 height;  
Line 5 weight;  
By age notsorted;  
Run;
```

Freq Statement

Treats observations as if they appear multiple times in the input data set.

Specifies a numeric variable whose value represents the frequency of each observation. If you use the FREQ statement, then the procedure assumes that each observation in the input data set represents n observations, where n is the value of variable. If n is not an integer, then PROC FORMS truncates it. If n is less than 1 (which includes missing), then the procedure does not use that observation. The sum of the frequency variable represents the total number of observations.

```
Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';  
Proc forms data=sashelp.class(obs=5) file=labels;  
Line 1 name;  
Line 2 sex;  
Line 3 age;  
Line 4 height;  
Line 5 weight;  
By age notsorted;  
Freq age;  
Run;
```

Line Statement

Specifies the information to print on one line of the form unit. Use one LINE statement for each line of the form unit.

LINE line-number variable(s) </ option(s)>;

Data ds;

Set sashelp.class;

Run;

Proc sort data=ds;

By sex;

Run;

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=ds **file**=labels;

Line 1 name;

Line 2 sex;

Line 3 age;

Line 4 height;

Line 5 weight;

By sex;

Run;

Options - Line Statement

INDENT=Specify the number of spaces to indent the line within the form unit.

Filename labels

'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=ds **file**=labels;

Line 1 name/**indent**=10;

Line 2 sex/**indent**=10;

Line 3 age;

Line 4 height/**indent**=2;

Line 5 weight/**indent**=2;

Run;

LASTNAME

Rotate the words in a character variable that contains a comma around the comma and remove the comma

Data ds;

Infile datalines;

Input idno name:\$18. Team: \$ strtwght endwght ;

Datalines;

1331 Jason,Schock blue 187 172

1067 Kanoko,Nagasaka green 135 122

1251 Richard,Rose blue 181 166

1192 Charlene,Armstrong yellow 152 139

```
1352 Bette,Long green 156 137
1262 Yao,Chen blue 196 180
1124 Adrienne,Fink green 156 142
```

```
;
```

```
Run;
```

```
Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';
```

```
Proc forms data=ds file=labels;
```

```
Line 1 idno ;
```

```
Line 2 name/lastname;
```

```
Line 3 team;
```

```
Line 4 strtwght;
```

```
Line 5 endwght;
```

```
Run;
```

```
Data ds;
```

```
Infile datalines;
```

```
Input idno name&$18. Team $ strtwght endwght ;
```

```
Datalines;
```

```
1331 Jason,Schock,Long blue 187 172
```

```
1067 Kanoko,Nagasaka green 135 122
```

```
1251 Richard,Rose blue 181 166
```

```
1192 Charlene,Armstrong yellow 152 139
```

```
1352 Bette,Long,Schock green 156 137
```

```
1262 Yao,Chen,Garg blue 196 180
```

```
1124 Adrienne,Fink green 156 142
```

```
;
```

```
Run;
```

```
Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';
```

```
Proc forms data=ds file=labels;
```

```
Line 1 idno/indent=10 ;
```

```
Line 2 name/indent=10/lastname;
```

```
Line 3 team;
```

```
Line 4 strtwght/indent=2;
```

```
Line 5 endwght/indent=2;
```

```
Run;
```

PACK

Remove extra blanks from the line so that one blank separates variables.

```
Data ds;
```

```
Infile datalines;
```

```
Input idno name:$18. Team: $ strtwght endwght ;
```

```
Datalines;
```

```
1331 Jason Schock blue 187 172
```



```
1067 Kanoko Nagasaka green 135 122
1251 Richard Rose blue 181 166
1192 Charlene Armstrong yellow 152 139
1352 Bette Long green 156 137
1262 Yao Chen blue 196 180
1124 Adrienne Fink green 156 142
```

```
;
```

Run;

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=ds **file**=labels;

Line 1 idno ;

Line 2 name/pack ;

Line 3 team;

Line 4 strtwght;

Line 5 endwght;

Run;

REMOVE

Removes periods that represent missing values from a line that contains no other values.

Data ds;

Infile datalines;

Input idno name&\$18. Team: \$ strtwght endwght ;

Datalines;

```
1331 Jason Schock blue 187 172
1067 Kanoko Nagasaka green 135 122
1251 Richard Rose blue 181 166
1192 Charlene Armstrong yellow 152 139
1352 Bette Long green 156 137
1262 Yao Chen blue 196 .
1124 Adrienne Fink green 156 142
```

```
;
```

Run;

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=ds **file**=labels;

Line 1 idno ;

Line 2 name;

Line 3 team;

Line 4 strtwght;

Line 5 endwght/remove;

Run;

Data list;

Input Name \$ 1-19 Street \$ 20-39 City \$ 40-54 State \$ 56-57 Zip \$ 59-63;

Datalines;

Ericson, Jane	211 Clancey Court	Chapel Hill	NC	27514
Dix, Martin L.	4 Shepherd	St. Norwich	VT	05055
Gabrielli, Theresa	24 Ridgetop	Rd. Westboro	MA	01581
Clayton, Aria	314 Bridge	St. Hanover	NH	03755
Archuleta, Ruby	Box 108	Milagro	NM	87429
Misiewicz, Jeremy	43-C Lakeview Apts.	Madison	WI	53704
Ahmadi, Hafez	5203 Marston	Way Boulder	CO	80302
Jacobson, Becky	7 Lincoln	St. Tallahassee	FL	32312
An, Ing	95 Willow	Dr. Charlotte	NC	28211
Slater, Emily C.	2009 Cherry	St. York	PA	17407

;

Run;

Example1:-

Printing a Single Form Unit

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc sort data=list;

by zip;

Run;

Proc forms data=list

file=labels

width=24

across=3

between=4

down=2

skip=2

align=2;

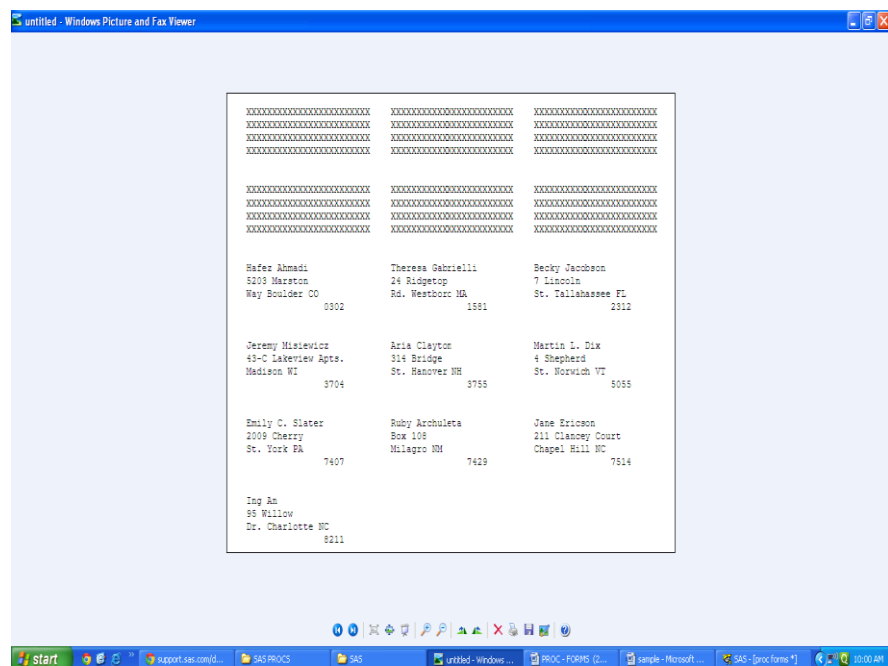
line 1 name / lastname;

line 2 street;

line 3 city state / pack;

line 4 zip / indent=15;

Run;



Example2:-

Printing Two Sets of Mailing Labels

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=list file=labels

ndown=4

cc

width=24

across=2

between=20

down=2

skip=3

align=0

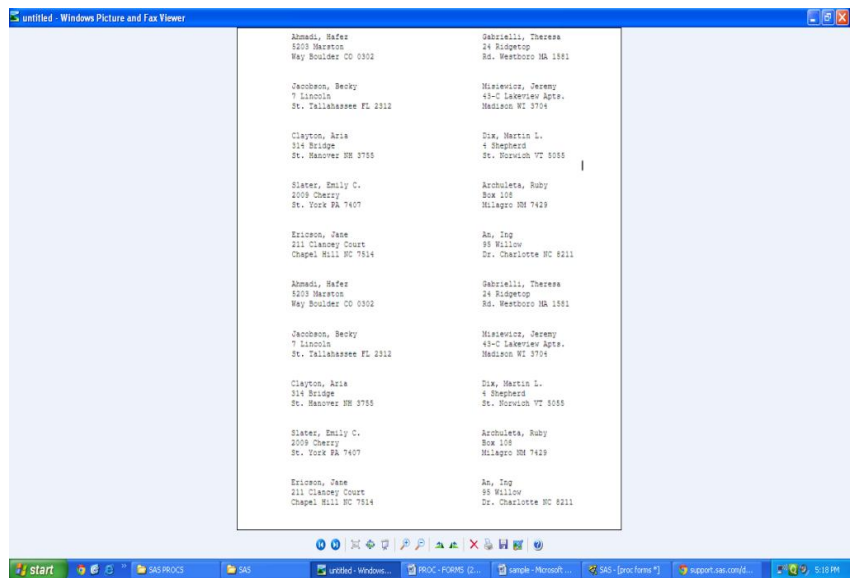
sets=2;

line 1 name;

line 2 street;

line 3 city state zip / pack;

Run;



Example3:-

Writing Multiple Copies of a Label within a Single Set of Labels

Filename labels 'C:\Documents and Settings\Administrator\Desktop\SAS\sample.rtf';

Proc forms data=list file=labels

ndown=5

cc

align=0

width=24

across=3

down=2

skip=2

copies=3;

line 1 name / lastname;

line 2 street;

line 3 city state zip / pack;

Where state in('ME', 'NH', 'VT', 'MA', 'CT', 'RI');

Run;

