

Program Summary - HW5.sas

Execution Environment

Author: sasdemo
File: /folders/myfolders/Homework/HW5/HW5.sas
SAS Platform: Linux LIN X64 2.6.32-696.20.1.el6.x86_64
SAS Host: LOCALHOST
SAS Version: 9.04.01M5P09132017
SAS Locale: en_US
Submission Time: 10/31/2018, 7:19:30 PM
Browser Host: 10.0.2.2
User Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/70.0.3538.77 Safari/537.36
Application Server: LOCALHOST.LOCALDOMAIN

Code: HW5.sas

```
/*Jonathan Wilson HW 5 */
```

```
data employees_sales;  
  input lname $ fname $ month $ sales;  
  datalines;  
Jones Ted Jan 28500  
Jones Ted Feb 31200  
Jones Ted Mar 14500  
Jones Ted Apr 23000  
Jones Ted May 42670  
Jones Ted Jun 52000  
Jones Ted Jul 1200  
Jones Ted Aug 13000  
Jones Ted Sep 19500  
Jones Ted Oct 18430  
Jones Ted Nov 19230  
Jones Ted Dec 68201  
Hall Kim Jan 12500  
Hall Kim Feb 13400  
Hall Kim Mar 17800  
Hall Kim Apr 21200  
Hall Kim May 23900  
Hall Kim Jun 24100  
Hall Kim Jul 25200  
Hall Kim Aug 23950  
Hall Kim Sep 22200  
Hall Kim Oct 21090  
Hall Kim Nov 18040  
Hall Kim Dec 14210  
Clark Guy Jan 32101  
Clark Guy Feb 43001  
Clark Guy Mar 29050  
Clark Guy Apr 25010  
Clark Guy May 22999  
Clark Guy Jun 20500  
Clark Guy Jul 21100  
Clark Guy Aug 23400  
Clark Guy Sep 27890
```

```
Clark Guy Oct 31090
Clark Guy Nov 52300
Clark Guy Dec 41230
Call Steve Jan 12090
Call Steve Feb 10901
Call Steve Mar 9080
Call Steve Apr 8541
Call Steve May 7521
Call Steve Jun 5300
Call Steve Jul 2510
Murphy Cori Jul 5700
Murphy Cori Aug 6900
Murphy Cori Sep 10200
Murphy Cori Oct 12050
Murphy Cori Nov 26800
Murphy Cori Dec 25963
Love Sue Jun 4800
Love Sue Jul 6900
Love Sue Aug 9500
Love Sue Sep 13420
Love Sue Oct 17890
Love Sue Nov 21090
Love Sue Dec 22500
;
```

```
/*Report #1 Displays only Last Name and Sales, ordered by Sales (greatest to least)*/
```

```
proc sort data=employees_sales;
    by descending sales; /*add the descending key word*/
run;
```

```
proc print data=employees_sales label noobs; /*noobs gets rid of observation numbers*/
```

```
    var lname sales;
    label lname='Last Name' sales='Sales';
    title1 'Report 1: Sales ordered greatest to least';
    footnote1 'My Corp.';
run;
```

```
/*Report #2 Displays only Last Name and Sales, ordered by Last Name.*/
```

```
proc sort data=employees_sales;
    by lname;
run;
```

```
proc print data=employees_sales label noobs;
```

```
    var lname sales;
    label lname='Last Name' sales='Sales';
    title1 'Report 2: Order by last name';
    footnote1 'My Corp.';
run;
```

```
/*Report 3: Sales means using CLASS*/
```

```
proc means data=employees_sales mean nonobs nway noprint;
    class lname;
    output out=results1 (drop=_TYPE_ _FREQ_)
        mean=meanSales;
    title1 'Report 3: Sales means using CLASS';
    footnote1 'My Corp.';
run;
```

```

proc print data=results1 noobs;
run;

/*To use a BY in the Proc means you need to use a proc sort step first*/
proc sort data=employees_sales;
  by lname;
run;

/*Report 3: Sales means using BY*/
proc means data=employees_sales mean nonobs nway noprint;
  by lname;
  class lname;
  output out=results2 (drop=_TYPE_ _FREQ_)
    mean=meanSales;
  title1 'Report 3: Sales means using BY';
  footnote1 'My Corp.';
run;

proc print data=results2 noobs;
run;

```

Log: HW5.sas

Warnings (2)

Notes (24)

```

1      OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
72
73      /*Jonathan Wilson HW 5 */
74
75      data employees_sales;
76          input lname $ fname $ month $ sales;
77          datalines;

```

NOTE: The data set WORK.EMPLOYEES_SALES has 56 observations and 4 variables.

NOTE: DATA statement used (Total process time):

```

real time      0.00 seconds
cpu time       0.01 seconds

```

```

134      ;
135
136
137
138      /*Report #1 Displays only Last Name and Sales, ordered by Sales (greatest to least)*/
139      proc sort data=employees_sales;
140          by descending sales; /*add the descending key word*/
141      run;

```

NOTE: There were 56 observations read from the data set WORK.EMPLOYEES_SALES.

NOTE: The data set WORK.EMPLOYEES_SALES has 56 observations and 4 variables.

NOTE: PROCEDURE SORT used (Total process time):

```

real time      0.01 seconds
cpu time       0.00 seconds

```

```

142
143      proc print data=employees_sales label noobs; /*noobs gets rid of observation numbers*/

```

```
144      var lname sales;
145      label lname='Last Name' sales='Sales';
146      title1 'Report 1: Sales ordered greatest to least';
147      footnote1 'My Corp.';
148      run;
```

NOTE: There were 56 observations read from the data set WORK.EMPLOYEES_SALES.

NOTE: PROCEDURE PRINT used (Total process time):

```
real time      0.21 seconds
cpu time       0.20 seconds
```

```
149
150      /*Report #2 Displays only Last Name and Sales, ordered by Last Name.*/
151      proc sort data=employees_sales;
152      by lname;
153      run;
```

NOTE: There were 56 observations read from the data set WORK.EMPLOYEES_SALES.

NOTE: The data set WORK.EMPLOYEES_SALES has 56 observations and 4 variables.

NOTE: PROCEDURE SORT used (Total process time):

```
real time      0.00 seconds
cpu time       0.01 seconds
```

```
154
155      proc print data=employees_sales label noobs;
156      var lname sales;
157      label lname='Last Name' sales='Sales';
158      title1 'Report 2: Order by last name';
159      footnote1 'My Corp.';
160      run;
```

NOTE: There were 56 observations read from the data set WORK.EMPLOYEES_SALES.

NOTE: PROCEDURE PRINT used (Total process time):

```
real time      0.14 seconds
cpu time       0.14 seconds
```

```
161
162      /*Report 3: Sales means using CLASS*/
163      proc means data=employees_sales mean nonobs nway noprint;
164      class lname;
165      output out=results1 (drop=_TYPE_ _FREQ_)
166      mean=meanSales;
167      title1 'Report 3: Sales means using CLASS';
168      footnote1 'My Corp.';
169      run;
```

NOTE: There were 56 observations read from the data set WORK.EMPLOYEES_SALES.

NOTE: The data set WORK.RESULTS1 has 6 observations and 2 variables.

NOTE: PROCEDURE MEANS used (Total process time):

```
real time      0.03 seconds
cpu time       0.03 seconds
```

```
170
171      proc print data=results1 noobs;
172      run;
```

NOTE: There were 6 observations read from the data set WORK.RESULTS1.

NOTE: PROCEDURE PRINT used (Total process time):

```
real time      0.04 seconds
cpu time       0.04 seconds
```

173

```
174      /*To use a BY in the Proc means you need to use a proc sort step first*/
175      proc sort data=employees_sales;
176      by lname;
177      run;
```

NOTE: Input data set is already sorted, no sorting done.

NOTE: PROCEDURE SORT used (Total process time):

real time 0.00 seconds

cpu time 0.00 seconds

```
178
179      /*Report 3: Sales means using BY*/
180      proc means data=employees_sales mean nonobs nway noprint;
181      by lname;
182      class lname;
183      output out=results2 (drop=_TYPE_ _FREQ_)
184             mean=meanSales;
185      title1 'Report 3: Sales means using BY';
186      footnote1 'My Corp.';
187      run;
```

WARNING: Variable lname already exists on file WORK.RESULTS2.

WARNING: The duplicate variables will not be included in the output data set of the output statement number 1.

NOTE: There were 56 observations read from the data set WORK.EMPLOYEES_SALES.

NOTE: The data set WORK.RESULTS2 has 6 observations and 2 variables.

NOTE: PROCEDURE MEANS used (Total process time):

real time 0.01 seconds

cpu time 0.01 seconds

```
188
189      proc print data=results2 noobs;
190      run;
```

NOTE: There were 6 observations read from the data set WORK.RESULTS2.

NOTE: PROCEDURE PRINT used (Total process time):

real time 0.06 seconds

cpu time 0.06 seconds

```
191
192
193
194
195      OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
208
```

Results: HW5.sas

Report 1: Sales ordered greatest to least

Last Name	Sales
Jones	68201
Clark	52300
Jones	52000
Clark	43001
Jones	42670
Clark	41230
Clark	32101
Jones	31200
Clark	31090
Clark	29050
Jones	28500
Clark	27890

Last Name	Sales
Murphy	26800
Murphy	25963
Hall	25200
Clark	25010
Hall	24100
Hall	23950
Hall	23900
Clark	23400
Jones	23000
Clark	22999
Love	22500
Hall	22200
Hall	21200
Clark	21100
Hall	21090
Love	21090
Clark	20500
Jones	19500
Jones	19230
Jones	18430
Hall	18040
Love	17890
Hall	17800
Jones	14500
Hall	14210
Love	13420
Hall	13400
Jones	13000
Hall	12500
Call	12090
Murphy	12050
Call	10901
Murphy	10200
Love	9500
Call	9080
Call	8541
Call	7521
Murphy	6900
Love	6900
Murphy	5700
Call	5300
Love	4800
Call	2510
Jones	1200

My Corp.

Report 2: Order by last name

Last Name	Sales
Call	12090
Call	10901
Call	9080
Call	8541
Call	7521
Call	5300
Call	2510
Clark	52300
Clark	43001
Clark	41230
Clark	32101

Last Name	Sales
Clark	31090
Clark	29050
Clark	27890
Clark	25010
Clark	23400
Clark	22999
Clark	21100
Clark	20500
Hall	25200
Hall	24100
Hall	23950
Hall	23900
Hall	22200
Hall	21200
Hall	21090
Hall	18040
Hall	17800
Hall	14210
Hall	13400
Hall	12500
Jones	68201
Jones	52000
Jones	42670
Jones	31200
Jones	28500
Jones	23000
Jones	19500
Jones	19230
Jones	18430
Jones	14500
Jones	13000
Jones	1200
Love	22500
Love	21090
Love	17890
Love	13420
Love	9500
Love	6900
Love	4800
Murphy	26800
Murphy	25963
Murphy	12050
Murphy	10200
Murphy	6900
Murphy	5700

My Corp.

Report 3: Sales means using CLASS

Iname	meanSales
Call	7991.86
Clark	30805.92
Hall	19799.17
Jones	27619.25
Love	13728.57
Murphy	14602.17

My Corp.

Report 3: Sales means using BY

Iname	meanSales
Call	7991.86
Clark	30805.92
Hall	19799.17
Jones	27619.25
Love	13728.57
Murphy	14602.17

My Corp.