

## Program Summary - 5\_HW.sas

---

### Execution Environment

Author: sasdemo  
File: /folders/myshortcuts/STAT124/SASUniversityEdition/myfolders/5\_HW.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: 9/12/2018, 8:03:13 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/68.0.3440.106 Safari/537.36  
Application Server: LOCALHOST.LOCALDOMAIN

---

### Code: 5\_HW.sas

```
/* simple data step */  
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
;
```

```
/* sorted by sales */
```

```
proc sort data=employees_sales out=employees_sales_sortSales;
  by descending sales;
run;
```

```
proc print data=employees_sales_sortSales noobs label; /* remembered to suppress obs */
  var lname sales;
  title 'Sales Report 1';
  label lname='Last Names';
  label sales='Sales';
```

```
/* sorted by last name */
```

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

```
proc print data=employees_sales_sortLname noobs label; /* remembered to suppress obs */
  var lname sales;
  title 'Sales Report 2';
  label lname='Last Names';
  label sales='Sales';
```

```
/* sales average by lname */
```

```
proc means data=employees_sales_sortLname mean noprint;
  by lname;
  output out=results (drop=_TYPE_ _FREQ_)
```

```

mean=sales;
run;

proc print data=results noobs label;
  title 'Sales Average Report 1';
  label lname='Last Names';
  label sales='Sales';
run;

/* sales average (class) by lname */
proc means data=employees_sales mean noprint;
  class lname;
  output out=results (drop=_TYPE_ _FREQ_)
    mean=sales;
run;

proc print data=results noobs label;
  title 'Sales Average Report 2';
  label lname='Last Names';
  label sales='Sales';

```

---

## Log: 5\_HW.sas

Notes (20)

```

1      OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
72
73      /* simple data step */
74      data employees_sales;
75          input lname $ fname $ month $ sales;
76          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           0.00 seconds

```

```

133      ;
134
135      /* sorted by sales */
136      proc sort data=employees_sales out=employees_sales_sortSales;
137          by descending sales;
138      run;

```

NOTE: There were 56 observations read from the data set WORK.EMPLOYEES\_SALES.

NOTE: The data set WORK.EMPLOYEES\_SALES\_SORTSALES has 56 observations and 4 variables.

NOTE: PROCEDURE SORT used (Total process time):

```

real time          0.00 seconds
cpu time           0.00 seconds

```

```

139
140      proc print data=employees_sales_sortSales noobs label; /* remembered to suppress obs */
141          var lname sales;
142          title 'Sales Report 1';
143          label lname='Last Names';
144          label sales='Sales';

```

```
145
146      /* sorted by last name */
```

NOTE: There were 56 observations read from the data set WORK.EMPLOYEES\_SALES\_SORTSALES.

NOTE: PROCEDURE PRINT used (Total process time):

```
real time      0.06 seconds
cpu time       0.07 seconds
```

```
147      proc sort data=employees_sales out=employees_sales_sortLname;
148      by lname;
149      run;
```

NOTE: There were 56 observations read from the data set WORK.EMPLOYEES\_SALES.

NOTE: The data set WORK.EMPLOYEES\_SALES\_SORTLNAME has 56 observations and 4 variables.

NOTE: PROCEDURE SORT used (Total process time):

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

```
150
151      proc print data=employees_sales_sortLname noobs label; /* remembered to suppress obs */
152      var lname sales;
153      title 'Sales Report 2';
154      label lname='Last Names';
155      label sales='Sales';
156
157      /* sales average by lname */
```

NOTE: There were 56 observations read from the data set WORK.EMPLOYEES\_SALES\_SORTLNAME.

NOTE: PROCEDURE PRINT used (Total process time):

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

```
158      proc means data=employees_sales_sortLname mean noprint;
159      by lname;
160      output out=results (drop=_TYPE_ _FREQ_)
161      mean=sales;
162      run;
```

NOTE: There were 56 observations read from the data set WORK.EMPLOYEES\_SALES\_SORTLNAME.

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

NOTE: PROCEDURE MEANS used (Total process time):

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

```
163
164      proc print data=results noobs label;
165      title 'Sales Average Report 1';
166      label lname='Last Names';
167      label sales='Sales';
168      run;
```

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

NOTE: PROCEDURE PRINT used (Total process time):

```
real time      0.01 seconds
cpu time       0.02 seconds
```

```
169
170      /* sales average (class) by lname */
171      proc means data=employees_sales mean noprint;
172      class lname;
173      output out=results (drop=_TYPE_ _FREQ_)
174      mean=sales;
175      run;
```

NOTE: There were 56 observations read from the data set WORK.EMPLOYEES\_SALES.

NOTE: The data set WORK.RESULTS has 7 observations and 2 variables.

NOTE: PROCEDURE MEANS used (Total process time):

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

```
176
177      proc print data=results noobs label;
178      title 'Sales Average Report 2';
179      label lname='Last Names';
180      label sales='Sales';
181
182      OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
195
```

---

## Results: 5\_HW.sas

### Sales Report 1

Last Names	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
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

Last Names	Sales
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

---

## Sales Report 2

Last Names	Sales
Call	12090
Call	10901
Call	9080
Call	8541
Call	7521
Call	5300
Call	2510
Clark	32101
Clark	43001
Clark	29050
Clark	25010
Clark	22999
Clark	20500
Clark	21100
Clark	23400
Clark	27890
Clark	31090
Clark	52300
Clark	41230
Hall	12500
Hall	13400
Hall	17800
Hall	21200
Hall	23900
Hall	24100

Last Names	Sales
Hall	25200
Hall	23950
Hall	22200
Hall	21090
Hall	18040
Hall	14210
Jones	28500
Jones	31200
Jones	14500
Jones	23000
Jones	42670
Jones	52000
Jones	1200
Jones	13000
Jones	19500
Jones	18430
Jones	19230
Jones	68201
Love	4800
Love	6900
Love	9500
Love	13420
Love	17890
Love	21090
Love	22500
Murphy	5700
Murphy	6900
Murphy	10200
Murphy	12050
Murphy	26800
Murphy	25963

---

### Sales Average Report 1

Last Names	Sales
Call	7991.86
Clark	30805.92
Hall	19799.17
Jones	27619.25
Love	13728.57
Murphy	14602.17

---

### Sales Average Report 2

Last Names	Sales
	21041.93
Call	7991.86
Clark	30805.92
Hall	19799.17
Jones	27619.25
Love	13728.57
Murphy	14602.17

