

Program Summary - np_validate.sas

Execution Environment

Author: u63417893
 File: /home/u63417893/BANZBB130/np_validate.sas
 SAS Platform: Linux LIN X64 3.10.0-1062.12.1.el7.x86_64
 SAS Host: ODAWS01-USW2-2.ODA.SAS.COM
 SAS Version: 9.04.01M7P08062020
 SAS Locale: en_US
 Submission Time: 6/1/2023, 11:38:25 PM
 Browser Host: BRAS-BASE-TOROON2176W-GRC-15-142-115-70-173.DSL.BELL.CA
 User Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/114.0.0.0 Safari/537.36
 Application Server: ODAMID00-USW2-2.ODA.SAS.COM

Code: np_validate.sas

*Group2-members

Chinonso Henry Ezeudogu
 John James
 Kaveen Dias
 Pubudu Dias
 Temitope Saubana
 Ugonna Okengwu;

*Part 1;

*Format the program to improve the spacing, What syntax error are detected;

```

data canadashoes;
set sashelp.shoes;
where region="Canada"; * " is missing;
Profit=Sales-Returns;
format Profit dollar9.;
run;
proc print data=canadashoes; *'Proc' should be used;
run;
* Canada shoes has 37 rows;
  
```

*Part 2;

*Qenstion 1,2,3,4;

```

libname Group4"/home/u63417893/BANZBB130";
run;
data Trial;
set Group4.NP_SUMMARY;
RUN;
  
```

```

title "Proc Means"; *Question 2;
  
```

```

proc means data= Trial;
var DayVisits TentCampers RVCampers; *Variables assigned;
run;
  
```

*The minimums for tentcampers and rvcampers is 0, value was not expected but could be predicted as there were a lot of dailyvisits;

```

Title"Print";
  
```

```

proc print data=TRIAL (obs=20);*Question 1;
  
```

```

var Reg Type ParkName DayVisits TentCampers RVCampers; *Variables assigned to print;
run;
  
```

*No heavy inconsistancy noted, tent and rv campers observations are minimal and non recurring;

```

Title"Univariate"; *Question 3;
Proc Univariate data= Trial;
var DayVisits TentCampers RVCampers; *Variables assigned;
Run;
*no negative values observed;

Title" Frequency";*Question 4;
Proc Freq data= Trial;
Table Reg Type; *Tables assigned;
Run;
*There are no lowercase codes. NC,NPRE AND RIVERWAYS occurs once;

```

Log: np_validate.sas

Notes (16)

```

1      OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
68
69      *Group2-members
70
71      Chinonso Henry Ezeudogu
72      John James
73      Kaveen Dias
74      Pubudu Dias
75      Temitope Saubana
76      Ugonna Okengwu;
77
78      *Part 1;
79      *Format the program to improve the spacing, What syntax error are detected;
80
81      data canadashoes;
82      set sashelp.shoes;
83      where region="Canada";  * " is missing;
84      Profit=Sales>Returns;
85      format Profit dollar9.;
86      run;

```

NOTE: There were 37 observations read from the data set SASHELP.SHOES.

WHERE region='Canada';

NOTE: The data set WORK.CANADASHOES has 37 observations and 8 variables.

NOTE: DATA statement used (Total process time):

real time	0.00 seconds
user cpu time	0.00 seconds
system cpu time	0.00 seconds
memory	848.62k
OS Memory	21924.00k
Timestamp	06/02/2023 03:38:25 AM
Step Count	54
Page Faults	0
Page Reclaims	156
Page Swaps	0
Voluntary Context Switches	10
Involuntary Context Switches	0
Block Input Operations	0
Block Output Operations	264

87 proc print data=canadashoes; *'Proc' should be used;

88 run;

NOTE: There were 37 observations read from the data set WORK.CANADASHOES.

NOTE: PROCEDURE PRINT used (Total process time):

real time	0.05 seconds
user cpu time	0.06 seconds

```

system cpu time    0.00 seconds
memory            1223.84k
OS Memory         22180.00k
Timestamp         06/02/2023 03:38:25 AM
Step Count                55  Switch Count  0
Page Faults              0
Page Reclaims           77
Page Swaps              0
Voluntary Context Switches 0
Involuntary Context Switches 0
Block Input Operations   0
Block Output Operations  24

```

```

89      * Canada shoes has 37 rows;
90
91      *Part 2;
92      *Question 1,2,3,4;
93
94      libname Group4"/home/u63417893/BANZBB130";
NOTE: Libref GROUP4 was successfully assigned as follows:
Engine:             V9
Physical Name: /home/u63417893/BANZBB130
95      run;
96      data Trial;
97      set Group4.NP_SUMMARY;
98      RUN;

```

NOTE: There were 135 observations read from the data set GROUP4.NP_SUMMARY.
 NOTE: The data set WORK.TRIAL has 135 observations and 10 variables.
 NOTE: DATA statement used (Total process time):

```

real time          0.00 seconds
user cpu time      0.00 seconds
system cpu time    0.00 seconds
memory            952.46k
OS Memory         22440.00k
Timestamp         06/02/2023 03:38:25 AM
Step Count                56  Switch Count  2
Page Faults              0
Page Reclaims        138
Page Swaps           0
Voluntary Context Switches 15
Involuntary Context Switches 0
Block Input Operations   0
Block Output Operations  264

```

```

99
100     title "Proc Means"; *Question 2;
101     proc means data= Trial;
102     var DayVisits TentCampers RVCampers; *Variables assigned;
103     run;

```

NOTE: There were 135 observations read from the data set WORK.TRIAL.
 NOTE: PROCEDURE MEANS used (Total process time):

```

real time          0.03 seconds
user cpu time      0.03 seconds
system cpu time    0.00 seconds
memory            6878.34k
OS Memory         28088.00k
Timestamp         06/02/2023 03:38:25 AM
Step Count                57  Switch Count  1
Page Faults              0
Page Reclaims        1542
Page Swaps           0
Voluntary Context Switches 17
Involuntary Context Switches 0
Block Input Operations   0
Block Output Operations   0

```

```

104     *The minimums for tentcampers and rvcampers is 0, value was not expected but could be predicted
105     as there were a lot of dailyvisits;
106

```

```

107      Title"Print";
108      proc print data=TRIAL (obs=20);*Question 1;
109      var Reg Type ParkName DayVisits TentCampers RVCampers; *Variables assigned to print;
110      run;

```

NOTE: There were 20 observations read from the data set WORK.TRIAL.

NOTE: PROCEDURE PRINT used (Total process time):

real time	0.03 seconds
user cpu time	0.04 seconds
system cpu time	0.00 seconds
memory	737.34k
OS Memory	22948.00k
Timestamp	06/02/2023 03:38:25 AM
Step Count	58
Switch Count	0
Page Faults	0
Page Reclaims	72
Page Swaps	0
Voluntary Context Switches	0
Involuntary Context Switches	0
Block Input Operations	0
Block Output Operations	16

```

111      *No heavy inconsistency noted, tent and rv campers observations are minimal and non recurring;
112

```

```

113      Title"Univariate"; *Question 3;
114      Proc Univariate data= Trial;
115      var DayVisits TentCampers RVCampers; *Variables assigned;
116      Run;

```

NOTE: PROCEDURE UNIVARIATE used (Total process time):

real time	0.14 seconds
user cpu time	0.14 seconds
system cpu time	0.00 seconds
memory	916.75k
OS Memory	22948.00k
Timestamp	06/02/2023 03:38:25 AM
Step Count	59
Switch Count	0
Page Faults	0
Page Reclaims	73
Page Swaps	0
Voluntary Context Switches	0
Involuntary Context Switches	0
Block Input Operations	0
Block Output Operations	48

```

117      *no negative values observed;
118
119      Title" Frequency";*Question 4;
120      Proc Freq data= Trial;
121      Table Reg Type; *Tables assigned;
122      Run;

```

NOTE: There were 135 observations read from the data set WORK.TRIAL.

NOTE: PROCEDURE FREQ used (Total process time):

real time	0.03 seconds
user cpu time	0.04 seconds
system cpu time	0.00 seconds
memory	889.96k
OS Memory	23208.00k
Timestamp	06/02/2023 03:38:25 AM
Step Count	60
Switch Count	2
Page Faults	0
Page Reclaims	123
Page Swaps	0
Voluntary Context Switches	15
Involuntary Context Switches	0
Block Input Operations	0
Block Output Operations	264

```

123      *There are no lowercase codes. NC,NPRE AND RIVERWAYS occurs once;
124

```

```
125
126
127
128
129
130
131
132
133     OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
143
```

Results: np_validate.sas

Obs	Region	Product	Subsidiary	Stores	Sales	Inventory	Returns	Profit
1	Canada	Boot	Calgary	8	\$17,720	\$63,280	\$472	\$17,248
2	Canada	Men's Dress	Calgary	1	\$12,775	\$39,663	\$353	\$12,422
3	Canada	Sandal	Calgary	7	\$2,886	\$15,838	\$147	\$2,739
4	Canada	Slipper	Calgary	2	\$5,676	\$48,061	\$253	\$5,423
5	Canada	Sport Shoe	Calgary	9	\$9,745	\$38,059	\$264	\$9,481
6	Canada	Women's Dress	Calgary	2	\$12,601	\$54,677	\$488	\$12,113
7	Canada	Boot	Montreal	25	\$40,213	\$240,132	\$1,472	\$38,741
8	Canada	Men's Casual	Montreal	3	\$53,929	\$187,155	\$2,241	\$51,688
9	Canada	Men's Dress	Montreal	11	\$112,009	\$355,170	\$3,713	\$108,296
10	Canada	Sandal	Montreal	7	\$3,002	\$18,382	\$122	\$2,880
11	Canada	Slipper	Montreal	24	\$135,305	\$500,053	\$3,395	\$131,910
12	Canada	Sport Shoe	Montreal	31	\$29,435	\$178,128	\$1,129	\$28,306
13	Canada	Women's Casual	Montreal	2	\$24,497	\$34,808	\$832	\$23,665
14	Canada	Women's Dress	Montreal	12	\$132,638	\$483,637	\$2,880	\$129,758
15	Canada	Boot	Ottawa	5	\$7,892	\$28,162	\$377	\$7,515
16	Canada	Men's Casual	Ottawa	1	\$19,210	\$29,249	\$578	\$18,632
17	Canada	Sandal	Ottawa	2	\$2,600	\$1,727	\$27	\$2,573
18	Canada	Slipper	Ottawa	10	\$30,905	\$89,576	\$1,397	\$29,508
19	Canada	Sport Shoe	Ottawa	6	\$2,598	\$15,007	\$204	\$2,394
20	Canada	Women's Casual	Ottawa	1	\$18,712	\$46,064	\$427	\$18,285
21	Canada	Women's Dress	Ottawa	4	\$33,824	\$84,378	\$939	\$32,885
22	Canada	Boot	Toronto	16	\$33,291	\$149,118	\$994	\$32,297
23	Canada	Men's Casual	Toronto	2	\$15,403	\$20,811	\$1,401	\$14,002
24	Canada	Men's Dress	Toronto	2	\$37,519	\$84,690	\$806	\$36,713
25	Canada	Sandal	Toronto	2	\$1,190	\$6,763	\$38	\$1,152
26	Canada	Slipper	Toronto	14	\$80,352	\$302,074	\$1,908	\$78,444
27	Canada	Sport Shoe	Toronto	29	\$34,585	\$164,113	\$913	\$33,672
28	Canada	Women's Casual	Toronto	4	\$63,492	\$149,239	\$1,700	\$61,792
29	Canada	Women's Dress	Toronto	7	\$53,940	\$165,711	\$1,967	\$51,973
30	Canada	Boot	Vancouver	31	\$286,497	\$882,080	\$9,160	\$277,337
31	Canada	Men's Casual	Vancouver	25	\$353,361	\$671,837	\$20,470	\$332,891
32	Canada	Men's Dress	Vancouver	28	\$757,798	\$1,847,559	\$16,833	\$740,965
33	Canada	Sandal	Vancouver	15	\$5,120	\$56,325	\$294	\$4,826
34	Canada	Slipper	Vancouver	27	\$700,513	\$2,520,085	\$21,247	\$679,266
35	Canada	Sport Shoe	Vancouver	26	\$64,026	\$370,388	\$2,297	\$61,729
36	Canada	Women's Casual	Vancouver	20	\$304,106	\$665,323	\$8,278	\$295,828
37	Canada	Women's Dress	Vancouver	21	\$756,347	\$2,503,387	\$19,378	\$736,969

Proc Means

The MEANS Procedure

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
DayVisits	Recreational Day Visitors	135	966022.48	1568838.29	1146.00	11312786.00
TentCampers	Tent Campers	135	23870.81	60590.83	0	490431.00
RVCampers	RV Campers	135	14761.33	40977.10	0	376744.00

Print

Obs	Reg	Type	ParkName	DayVisits	TentCampers	RVCampers
1	A	NM	Cape Krusenstern National Monument	15,000	0	0
2	A	NP	Kenai Fjords National Park	346,534	1,514	0
3	A	NP	Kobuk Valley National Park	15,500	0	0
4	A	PRE	Yukon-Charley Rivers National Preserve	1,146	0	0

Obs	Reg	Type	ParkName	DayVisits	TentCampers	RVCampers
5	A	PRE	Bering Land Bridge National Preserve	2,642	0	0
6	A	PRESERVE	Noatak National Preserve	17,000	0	0
7	IM	NM	Alibates Flint Quarries National Monument	8,153	0	0
8	IM	NM	Aztec Ruins National Monument	57,692	0	0
9	IM	NM	Bandelier National Monument	198,478	5,704	4,164
10	IM	NM	Canyon De Chelly National Monument	821,406	0	0
11	IM	NM	Capulin Volcano National Monument	60,132	0	0
12	IM	NM	Casa Grande Ruins National Monument	75,752	0	0
13	IM	NM	Cedar Breaks National Monument	899,676	2,501	1,776
14	IM	NM	Chiricahua National Monument	51,277	5,966	5,708
15	IM	NM	Colorado National Monument	391,075	16,202	14,601
16	IM	NM	Devils Tower National Monument	496,210	10,850	6,533
17	IM	NM	Dinosaur National Monument	304,312	17,207	13,604
18	IM	NM	El Malpais National Monument	157,440	0	0
19	IM	NM	El Morro National Monument	59,422	1,704	1,291
20	IM	NM	Florissant Fossil Beds National Monument	73,564	0	0

Univariate

The UNIVARIATE Procedure
Variable: DayVisits (Recreational Day Visitors)

Moments			
N	135	Sum Weights	135
Mean	966022.481	Sum Observations	130413035
Std Deviation	1568838.29	Variance	2.46125E12
Skewness	3.23070233	Kurtosis	14.5979115
Uncorrected SS	4.5579E14	Corrected SS	3.29808E14
Coeff Variation	162.40184	Std Error Mean	135024.101

Basic Statistical Measures			
Location		Variability	
Mean	966022.5	Std Deviation	1568838
Median	388290.0	Variance	2.46125E12
Mode	.	Range	11311640
		Interquartile Range	1026396

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	7.154445	Pr > t	<.0001
Sign	M	67.5	Pr >= M	<.0001
Signed Rank	S	4590	Pr >= S	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	11312786
99%	5969811
95%	4517585
90%	2946681
75% Q3	1102148
50% Median	388290
25% Q1	75752
10%	28646
5%	15555
1%	2642
0% Min	1146

Extreme Observations				
Lowest		Highest		
Value	Obs	Value	Obs	
1146	4	4771309	134	
2642	5	4812930	80	
8153	7	5028868	111	
11953	21	5969811	47	

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
15000	1	11312786	126

Univariate

The UNIVARIATE Procedure
Variable: TentCampers (Tent Campers)

Moments			
N	135	Sum Weights	135
Mean	23870.8074	Sum Observations	3222559
Std Deviation	60590.8347	Variance	3671249250
Skewness	4.5115561	Kurtosis	27.3676348
Uncorrected SS	5.68872E11	Corrected SS	4.91947E11
Coeff Variation	253.828175	Std Error Mean	5214.82875

Basic Statistical Measures			
Location		Variability	
Mean	23870.81	Std Deviation	60591
Median	0.00	Variance	3671249250
Mode	0.00	Range	490431
		Interquartile Range	13513

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	4.577486	Pr > t	<.0001
Sign	M	30.5	Pr >= M	<.0001
Signed Rank	S	945.5	Pr >= S	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	490431
99%	232964
95%	137442
90%	97443
75% Q3	13513
50% Median	0
25% Q1	0
10%	0
5%	0
1%	0
0% Min	0

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
0	132	152811	85
0	130	190574	126
0	129	206626	47
0	127	232964	103
0	123	490431	111

Univariate

The UNIVARIATE Procedure
Variable: RVCampers (RV Campers)

Moments			
N	135	Sum Weights	135
Mean	14761.3259	Sum Observations	1992779
Std Deviation	40977.0967	Variance	1679122457
Skewness	5.90922524	Kurtosis	46.2698016
Uncorrected SS	2.54418E11	Corrected SS	2.25002E11

Moments			
Coeff Variation	277.597669	Std Error Mean	3526.74696

Basic Statistical Measures			
Location		Variability	
Mean	14761.33	Std Deviation	40977
Median	0.00	Variance	1679122457
Mode	0.00	Range	376744
		Interquartile Range	12073

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	4.185536	Pr > t	<.0001
Sign	M	26	Pr >= M	<.0001
Signed Rank	S	689	Pr >= S	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	376744
99%	140712
95%	70728
90%	51255
75% Q3	12073
50% Median	0
25% Q1	0
10%	0
5%	0
1%	0
0% Min	0

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
0	133	106399	99
0	132	111680	126
0	130	126933	46
0	129	140712	134
0	127	376744	111

Frequency

The FREQ Procedure

Region Code				
Reg	Frequency	Percent	Cumulative Frequency	Cumulative Percent
A	6	4.44	6	4.44
IM	52	38.52	58	42.96
MW	18	13.33	76	56.30
NC	1	0.74	77	57.04
NE	13	9.63	90	66.67
PW	23	17.04	113	83.70
SE	22	16.30	135	100.00

Type	Frequency	Percent	Cumulative Frequency	Cumulative Percent
NM	63	46.67	63	46.67
NP	51	37.78	114	84.44
NPRE	1	0.74	115	85.19
NS	10	7.41	125	92.59
PRE	3	2.22	128	94.81
PRESERVE	4	2.96	132	97.78
RIVERWAYS	1	0.74	133	98.52
RVR	2	1.48	135	100.00

