

Program Summary - KanishkDataAnalyticsIA.sas

Execution Environment

Author: u59513296
 File: /home/u59513296/IndividualAssignment/FNT 204 Data Analytics/KanishkDataAnalyticsIA.sas
 SAS Platform: Linux LIN X64 3.10.0-1062.9.1.el7.x86_64
 SAS Host: ODAWS02-USW2.ODA.SAS.COM
 SAS Version: 9.04.01M7P08062020
 SAS Locale: en_US
 Submission Time: 6/30/2023, 7:22:39 PM
 Browser Host: LNSM1-TORONTO10-142-116-152-56.INTERNET.VIRGINMOBILE.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: ODAMID01-USW2.ODA.SAS.COM

Code: KanishkDataAnalyticsIA.sas

```

proc import file="/home/u59513296/IndividualAssignment/FNT 204 Data Analytics/Individual Analytics Assignment _data file
out=rahimstore
dbms=xlsx
replace;
getnames=yes;
run;
proc print data=rahimstore;
run;
proc contents data=rahimstore;
run;
proc freq data=rahimstore;
table Sales_Transaction;
run;
proc means data=rahimstore min max mean median mode skewness ;
run;
proc univariate data=rahimstore;
run;
PROC ANOVA DATA=rahimstore;
CLASS Family_Income;
MODEL Sales_Transaction=Family_Income ;
RUN;
proc sgplot data=rahimstore;
scatter x=Sales_Transaction y=Family_Income / markerattrs=(color=blue);
xaxis label='Sales Transaction';
yaxis label='Family Income';
run;
proc sgplot data=rahimstore;
scatter x=Sales_Transaction y=Family_Size / markerattrs=(color=blue);
xaxis label='Sales Transaction';
yaxis label='Family Size';
run;
proc sgplot data=rahimstore;
scatter x=Sales_Transaction y=Number_of_items / markerattrs=(color=blue);
xaxis label='Sales Transaction';
yaxis label='Number of items';
run;
proc sgplot data=rahimstore;
scatter x=Sales_Transaction y=Number_of_Vehicles / markerattrs=(color=blue);
xaxis label='Sales Transaction';
yaxis label='Number of vehicles';
run;
proc sgplot data=rahimstore;
scatter x=Sales_Transaction y=Distance_to_Store / markerattrs=(color=blue);
xaxis label='Sales Transaction';
yaxis label='Distance to store (km)';
run;

```

Log: KanishkDataAnalyticsIA.sas

Notes (22)

```

1      OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
68
69      proc import file="/home/u59513296/IndividualAssignment/FNT 204 Data Analytics/Individual Analytics Assignment _data file
69      ! KK.xlsx"
70      out=rahimstore
71      dbms=xlsx
72      replace;
73      getnames=yes;
74      run;

```

NOTE: The import data set has 150 observations and 7 variables.

NOTE: WORK.RAHIMSTORE data set was successfully created.

NOTE: PROCEDURE IMPORT used (Total process time):

real time	0.02 seconds	
user cpu time	0.02 seconds	
system cpu time	0.01 seconds	
memory	3366.25k	
OS Memory	22264.00k	
Timestamp	06/30/2023 11:22:34 PM	
Step Count	24	Switch Count 2
Page Faults	0	
Page Reclaims	1008	
Page Swaps	0	
Voluntary Context Switches	19	
Involuntary Context Switches	0	
Block Input Operations	32	
Block Output Operations	264	

```
75      proc print data=rahimstore;
76      run;
```

NOTE: There were 150 observations read from the data set WORK.RAHIMSTORE.

NOTE: PROCEDURE PRINT used (Total process time):

real time	0.18 seconds	
user cpu time	0.19 seconds	
system cpu time	0.00 seconds	
memory	1269.90k	
OS Memory	20900.00k	
Timestamp	06/30/2023 11:22:35 PM	
Step Count	25	Switch Count 0
Page Faults	0	
Page Reclaims	466	
Page Swaps	0	
Voluntary Context Switches	0	
Involuntary Context Switches	0	
Block Input Operations	0	
Block Output Operations	72	

```
77      proc contents data=rahimstore;
78      run;
```

NOTE: PROCEDURE CONTENTS used (Total process time):

real time	0.03 seconds	
user cpu time	0.04 seconds	
system cpu time	0.00 seconds	
memory	1463.84k	
OS Memory	21416.00k	
Timestamp	06/30/2023 11:22:35 PM	
Step Count	26	Switch Count 0
Page Faults	0	
Page Reclaims	556	
Page Swaps	0	
Voluntary Context Switches	2	
Involuntary Context Switches	0	
Block Input Operations	0	
Block Output Operations	24	

```
79      proc freq data=rahimstore;
80      table Sales_Transaction;
81      run;
```

NOTE: There were 150 observations read from the data set WORK.RAHIMSTORE.

NOTE: PROCEDURE FREQ used (Total process time):

real time	0.11 seconds	
user cpu time	0.12 seconds	
system cpu time	0.00 seconds	
memory	834.56k	
OS Memory	21416.00k	
Timestamp	06/30/2023 11:22:35 PM	
Step Count	27	Switch Count 2
Page Faults	0	
Page Reclaims	296	
Page Swaps	0	
Voluntary Context Switches	13	
Involuntary Context Switches	1	
Block Input Operations	0	
Block Output Operations	312	

```
82      proc means data=rahimstore min max mean median mode skewness ;
83      run;
```

NOTE: There were 150 observations read from the data set WORK.RAHIMSTORE.

NOTE: PROCEDURE MEANS used (Total process time):

real time	0.04 seconds
user cpu time	0.04 seconds
system cpu time	0.01 seconds
memory	6415.43k
OS Memory	26808.00k

```

Timestamp          06/30/2023 11:22:35 PM
Step Count          28  Switch Count  1
Page Faults         0
Page Reclaims       1608
Page Swaps          0
Voluntary Context Switches  25
Involuntary Context Switches 0
Block Input Operations 0
Block Output Operations 16

```

```

84      proc univariate data=rahimstore;
85      run;

```

NOTE: PROCEDURE UNIVARIATE used (Total process time):

```

real time          0.29 seconds
user cpu time       0.29 seconds
system cpu time     0.00 seconds
memory             921.81k
OS Memory          21668.00k
Timestamp          06/30/2023 11:22:35 PM
Step Count          29  Switch Count  0
Page Faults         0
Page Reclaims       215
Page Swaps          0
Voluntary Context Switches 0
Involuntary Context Switches 1
Block Input Operations 0
Block Output Operations 104

```

```

86      PROC ANOVA DATA=rahimstore;
87      CLASS Family_Income;
88      MODEL Sales_Transaction=Family_Income ;
89      RUN;

```

NOTE: PROCEDURE ANOVA used (Total process time):

```

real time          2.90 seconds
user cpu time       0.28 seconds
system cpu time     0.03 seconds
memory             9845.34k
OS Memory          31148.00k
Timestamp          06/30/2023 11:22:38 PM
Step Count          30  Switch Count  7
Page Faults         0
Page Reclaims       3650
Page Swaps          0
Voluntary Context Switches 10628
Involuntary Context Switches 0
Block Input Operations 0
Block Output Operations 1136

```

```

90      proc sgplot data=rahimstore;
91      scatter x=Sales_Transaction y=Family_Income / markerattrs=(color=blue);
92      xaxis label='Sales Transaction';
93      yaxis label='Family Income';
94      run;

```

NOTE: PROCEDURE SGPLOT used (Total process time):

```

real time          0.15 seconds
user cpu time       0.03 seconds
system cpu time     0.00 seconds
memory             1408.62k
OS Memory          31788.00k
Timestamp          06/30/2023 11:22:38 PM
Step Count          31  Switch Count  1
Page Faults         0
Page Reclaims       606
Page Swaps          0
Voluntary Context Switches 135
Involuntary Context Switches 0
Block Input Operations 0
Block Output Operations 384

```

NOTE: There were 150 observations read from the data set WORK.RAHIMSTORE.

```

95      proc sgplot data=rahimstore;
96      scatter x=Sales_Transaction y=Family_Size / markerattrs=(color=blue);
97      xaxis label='Sales Transaction';
98      yaxis label='Family Size';
99      run;

```

NOTE: PROCEDURE SGPLOT used (Total process time):

```

real time          0.11 seconds
user cpu time       0.03 seconds
system cpu time     0.00 seconds
memory             2004.46k
OS Memory          31788.00k
Timestamp          06/30/2023 11:22:38 PM
Step Count          32  Switch Count  1

```

```

Page Faults              0
Page Reclaims            309
Page Swaps               0
Voluntary Context Switches 133
Involuntary Context Switches 0
Block Input Operations    0
Block Output Operations   360

NOTE: There were 150 observations read from the data set WORK.RAHIMSTORE.

100      proc sgplot data=rahimstore;
101          scatter x=Sales_Transaction y=Number_of_items / markerattrs=(color=blue);
102          xaxis label='Sales Transaction';
103          yaxis label='Number of items';
104          run;

NOTE: PROCEDURE SGPLOT used (Total process time):
real time          0.10 seconds
user cpu time      0.03 seconds
system cpu time    0.01 seconds
memory            2023.28k
OS Memory         31788.00k
Timestamp         06/30/2023 11:22:38 PM
Step Count        33  Switch Count  1
Page Faults       0
Page Reclaims     295
Page Swaps        0
Voluntary Context Switches 133
Involuntary Context Switches 0
Block Input Operations 0
Block Output Operations 384

NOTE: There were 150 observations read from the data set WORK.RAHIMSTORE.

105      proc sgplot data=rahimstore;
106          scatter x=Sales_Transaction y=Number_of_Vehicles / markerattrs=(color=blue);
107          xaxis label='Sales Transaction';
108          yaxis label='Number of vehicles';
109          run;

NOTE: PROCEDURE SGPLOT used (Total process time):
real time          0.07 seconds
user cpu time      0.03 seconds
system cpu time    0.00 seconds
memory            2019.43k
OS Memory         31788.00k
Timestamp         06/30/2023 11:22:38 PM
Step Count        34  Switch Count  1
Page Faults       0
Page Reclaims     291
Page Swaps        0
Voluntary Context Switches 134
Involuntary Context Switches 0
Block Input Operations 0
Block Output Operations 360

NOTE: There were 150 observations read from the data set WORK.RAHIMSTORE.

110      proc sgplot data=rahimstore;
111          scatter x=Sales_Transaction y=Distance_to_Store / markerattrs=(color=blue);
112          xaxis label='Sales Transaction';
113          yaxis label='Distance to store (km)';
114          run;

NOTE: PROCEDURE SGPLOT used (Total process time):
real time          0.07 seconds
user cpu time      0.03 seconds
system cpu time    0.00 seconds
memory            1987.03k
OS Memory         31788.00k
Timestamp         06/30/2023 11:22:39 PM
Step Count        35  Switch Count  1
Page Faults       0
Page Reclaims     290
Page Swaps        0
Voluntary Context Switches 134
Involuntary Context Switches 0
Block Input Operations 0
Block Output Operations 376

NOTE: There were 150 observations read from the data set WORK.RAHIMSTORE.

115
116
117      OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
127
```

Obs#	Observation#	Sales_Transaction#	Family_Income	Family_Size	Number_of_items	Number_of_Vehicles	Distance_to_Store
3	3	\$197.92	\$86,185	1	21	2	14
4	4	\$315.75	\$145,998	3	35	1	8
5	5	\$202.89	\$79,341	1	42	2	19
6	6	\$197.30	\$77,115	2	17	1	2
7	7	\$195.20	\$73,725	2	31	1	4
8	8	\$232.51	\$88,371	1	39	2	8
9	9	\$146.32	\$75,942	1	12	3	8
10	10	\$125.05	\$70,298	1	16	0	2
11	11	\$226.49	\$75,117	2	35	2	8
12	12	\$153.20	\$84,099	1	14	2	1
13	13	\$210.36	\$133,674	2	22	2	2
14	14	\$328.55	\$140,138	5	47	2	1
15	15	\$171.81	\$79,702	1	19	1	5
16	16	\$152.58	\$71,737	1	21	1	2
17	17	\$349.30	\$111,318	4	53	3	7
18	18	\$199.17	\$87,733	1	32	2	2
19	19	\$320.72	\$118,580	3	45	1	2
20	20	\$340.49	\$145,432	4	56	2	1
21	21	\$180.63	\$92,251	1	30	3	2
22	22	\$262.94	\$142,738	2	28	3	15
23	23	\$191.03	\$92,229	1	31	2	5
24	24	\$238.06	\$70,334	1	34	2	18
25	25	\$245.99	\$125,378	2	49	1	5
26	26	\$223.94	\$80,080	1	36	3	18
27	27	\$165.03	\$82,583	1	27	2	3
28	28	\$121.66	\$74,193	1	12	0	3
29	29	\$254.96	\$135,549	2	31	1	3
30	30	\$298.88	\$114,622	3	65	2	1
31	31	\$215.28	\$92,582	1	33	1	16
32	32	\$193.94	\$79,729	1	20	1	7
33	33	\$189.21	\$92,773	1	26	2	12
34	34	\$199.47	\$82,783	1	27	3	13
35	35	\$193.08	\$80,541	1	24	0	8
36	36	\$166.77	\$81,689	1	19	1	5
37	37	\$247.30	\$70,189	2	42	1	17
38	38	\$271.74	\$117,565	4	51	1	3
39	39	\$433.71	\$144,983	5	78	3	6
40	40	\$276.48	\$112,576	4	56	2	1
41	41	\$149.91	\$91,032	1	24	2	1
42	42	\$199.06	\$71,648	2	37	3	4
43	43	\$248.14	\$121,292	2	40	1	1
44	44	\$353.79	\$143,403	4	52	3	7
45	45	\$196.95	\$73,542	1	23	1	6
46	46	\$174.85	\$83,166	1	31	3	6
47	47	\$290.44	\$125,058	3	39	3	1
48	48	\$271.55	\$123,556	3	43	0	1
49	49	\$150.25	\$84,023	1	17	3	1
50	50	\$203.58	\$87,488	1	32	1	12
51	51	\$152.48	\$82,898	1	16	1	2
52	52	\$208.06	\$90,899	1	38	2	19
53	53	\$232.43	\$91,812	1	29	1	15
54	54	\$407.94	\$123,296	5	68	2	4
55	55	\$179.10	\$75,906	2	29	2	14
56	56	\$167.13	\$77,008	1	24	1	6
57	57	\$178.46	\$86,762	1	30	3	3
58	58	\$170.56	\$86,909	1	33	1	8
59	59	\$431.05	\$127,294	5	88	2	15
60	60	\$184.60	\$82,113	1	24	0	5
61	61	\$163.63	\$83,854	1	19	2	9
62	62	\$184.58	\$82,138	1	27	1	14
63	63	\$300.62	\$116,628	2	43	1	10
64	64	\$234.69	\$93,194	2	33	1	9
65	65	\$304.72	\$136,723	5	41	1	1
66	66	\$371.50	\$121,625	5	49	3	2
67	67	\$202.65	\$112,862	2	25	2	2
68	68	\$321.67	\$121,573	3	42	2	13
69	69	\$258.39	\$120,569	2	46	3	2
70	70	\$163.96	\$87,004	1	24	3	2
71	71	\$311.57	\$134,373	2	47	1	1
72	72	\$170.43	\$81,861	1	26	3	5
73	73	\$336.69	\$121,268	3	33	3	2
74	74	\$220.75	\$72,413	1	45	0	13
75	75	\$192.27	\$82,942	1	45	1	14
76	76	\$215.06	\$127,797	2	50	3	9
77	77	\$211.91	\$73,225	1	41	3	3
78	78	\$270.69	\$120,569	3	50	2	2
79	79	\$210.01	\$87,070	2	35	2	6
80	80	\$139.28	\$85,280	1	17	1	4
81	81	\$160.84	\$71,568	1	25	3	2
82	82	\$337.44	\$112,257	5	52	3	12
83	83	\$200.46	\$74,481	1	41	3	5
84	84	\$244.48	\$121,372	2	35	2	2
85	85	\$317.72	\$119,911	5	49	2	2
86	86	\$212.06	\$74,009	1	33	3	13
87	87	\$235.11	\$82,628	2	44	2	11
88	88	\$261.14	\$111,943	2	60	1	18

Obs	Observations	Sales_Transaction	Family_Income	Family_Size	Number_of_items	Number_of_Vehicles	Distance_to_Store
89	89	\$329.03	\$130,818	3	40	2	17
90	90	\$263.50	\$145,252	2	33	2	14
91	91	\$269.67	\$118,201	3	43	1	1
92	92	\$222.79	\$91,021	1	29	1	1
93	93	\$245.12	\$125,745	2	37	3	2
94	94	\$272.12	\$137,562	2	44	1	1
95	95	\$345.92	\$126,541	3	46	2	7
96	96	\$212.01	\$130,137	2	39	1	1
97	97	\$171.74	\$82,585	1	50	3	8
98	98	\$433.44	\$123,674	3	97	1	8
99	99	\$317.22	\$141,302	4	48	3	4
100	100	\$224.79	\$70,046	2	36	3	11
101	101	\$224.79	\$70,046	2	11	1	3
102	102	\$198.75	\$65,508	1	5	0	0
103	103	\$243.60	\$101,351	2	15	0	1
104	104	\$397.87	\$144,531	3	10	1	1
105	105	\$403.20	\$123,457	2	25	2	1
106	106	\$75.00	\$107,443	1	8	0	1
107	107	\$204.35	\$107,359	3	17	2	1
108	108	\$257.89	\$147,031	2	11	1	2
109	109	\$100.07	\$100,000	1	12	1	1
110	110	\$332.56	\$132,422	4	9	2	2
111	111	\$274.65	\$134,071	3	11	2	1
112	112	\$112.35	\$127,275	1	10	1	1
113	113	\$89.56	\$82,087	2	8	1	1
114	114	\$97.85	\$90,543	1	8	0	1
115	115	\$125.45	\$131,337	1	10	1	1
116	116	\$275.68	\$134,087	4	11	1	1
117	117	\$301.20	\$155,117	4	14	3	2
118	118	\$378.43	\$175,879	5	13	3	2
119	119	\$243.89	\$167,453	2	14	1	1
120	120	\$67.45	\$72,003	1	8	0	1
121	121	\$109.87	\$97,511	2	8	1	0
122	122	\$254.45	\$122,335	2	10	1	1
123	123	\$78.64	\$71,765	1	8	1	1
124	124	\$90.12	\$86,543	1	8	1	1
125	125	\$156.75	\$73,008	1	4	1	1
126	126	\$118.23	\$71,193	1	3	0	0
127	127	\$190.20	\$103,012	2	11	1	1
128	128	\$178.23	\$91,861	2	5	0	1
129	129	\$453.40	\$254,500	6	16	4	2
130	130	\$176.98	\$98,725	2	10	1	1
131	131	\$163.34	\$69,750	1	10	1	0
132	132	\$57.39	\$71,250	1	15	0	1
133	133	\$202.09	\$141,235	2	11	1	1
134	134	\$273.45	\$165,450	2	8	1	1
135	135	\$100.01	\$95,500	2	8	1	0
136	136	\$162.84	\$95,532	2	4	1	1
137	137	\$99.45	\$89,765	1	6	1	0
138	138	\$17.89	\$62,712	1	3	2	0
139	139	\$498.23	\$257,678	6	11	5	3
140	140	\$345.67	\$162,141	4	15	3	2
141	141	\$223.56	\$111,345	2	7	2	1
142	142	\$109.87	\$91,324	1	6	1	1
143	143	\$790.31	\$68,793	1	3	0	0
144	144	\$205.30	\$143,723	3	12	2	1
145	145	\$227.89	\$101,345	2	4	1	1
146	146	\$134.89	\$88,234	1	3	1	1
147	147	\$154.32	\$93,532	1	4	0	1
148	148	\$302.46	\$172,500	4	15	3	3
149	149	\$203.65	\$135,723	2	15	2	1
150	150	\$188.12	\$165,450	4	10	3	1

The CONTENTS Procedure

Data Set Name	WORK.RAHIMSTORE	Observations	150
Member Type	DATA	Variables	7
Engine	V9	Indexes	0
Created	06/30/2023 19:22:35	Observation Length	56
Last Modified	06/30/2023 19:22:35	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	SOLARIS_X86_64, LINUX_X86_64, ALPHA_TRU64, LINUX_IA64		
Encoding	utf-8 Unicode (UTF-8)		

Engine/Host Dependent Information	
Data Set Page Size	131072
Number of Data Set Pages	1
First Data Page	1
Max Obs per Page	2334
Obs in First Data Page	150
Number of Data Set Repairs	0
Filename	/saswork/SAS_work2A5F00000A98_odaws02-usw2.oda.sas.com/SAS_workAD8100000A98_odaws02-usw2.oda.sas.com/rahimstore.sas7bdat

Engine/Host Dependent Information	
Release Created	9.0401M7
Host Created	Linux
Inode Number	1610728780
Access Permission	rw-r--r--
Owner Name	u59513296
File Size	256KB
File Size (bytes)	262144

Alphabetic List of Variables and Attributes					
#	Variable	Type	Len	Format	Label
7	Distance_to_Store	Num	8	BEST.	Distance_to_Store
3	Family_Income	Num	8	NLMNY15.	Family_Income
4	Family_Size	Num	8	BEST.	Family_Size
6	Number_of_Vehicles	Num	8	BEST.	Number_of_Vehicles
5	Number_of_items	Num	8	BEST.	Number_of_items
1	Observations	Num	8	15.	Observations
2	Sales_Transaction	Num	8	NLMNY15.2	Sales_Transaction

The FREQ Procedure

Sales_Transaction				
Sales_Transaction	Frequency	Percent	Cumulative Frequency	Cumulative Percent
\$17.89	1	0.67	1	0.67
\$57.39	1	0.67	2	1.33
\$67.45	1	0.67	3	2.00
\$75.00	1	0.67	4	2.67
\$78.64	1	0.67	5	3.33
\$89.56	1	0.67	6	4.00
\$90.12	1	0.67	7	4.67
\$97.85	1	0.67	8	5.33
\$99.45	1	0.67	9	6.00
\$100.01	1	0.67	10	6.67
\$100.07	1	0.67	11	7.33
\$109.87	2	1.33	13	8.67
\$112.35	1	0.67	14	9.33
\$118.23	1	0.67	15	10.00
\$121.66	1	0.67	16	10.67
\$125.05	1	0.67	17	11.33
\$125.45	1	0.67	18	12.00
\$134.89	1	0.67	19	12.67
\$139.28	1	0.67	20	13.33
\$146.32	1	0.67	21	14.00
\$149.91	1	0.67	22	14.67
\$150.25	1	0.67	23	15.33
\$152.48	1	0.67	24	16.00
\$152.58	1	0.67	25	16.67
\$153.20	1	0.67	26	17.33
\$154.32	1	0.67	27	18.00
\$156.75	1	0.67	28	18.67
\$160.84	1	0.67	29	19.33
\$162.84	1	0.67	30	20.00
\$163.34	1	0.67	31	20.67
\$163.63	1	0.67	32	21.33
\$163.96	1	0.67	33	22.00
\$165.03	1	0.67	34	22.67
\$166.77	1	0.67	35	23.33
\$167.13	1	0.67	36	24.00
\$170.43	1	0.67	37	24.67
\$170.56	1	0.67	38	25.33
\$171.74	1	0.67	39	26.00
\$171.81	1	0.67	40	26.67
\$174.85	1	0.67	41	27.33
\$176.98	1	0.67	42	28.00
\$178.23	1	0.67	43	28.67
\$178.46	1	0.67	44	29.33
\$179.10	1	0.67	45	30.00
\$180.63	1	0.67	46	30.67
\$184.58	1	0.67	47	31.33
\$184.60	1	0.67	48	32.00
\$188.12	1	0.67	49	32.67
\$189.21	1	0.67	50	33.33
\$190.20	1	0.67	51	34.00
\$191.03	1	0.67	52	34.67
\$192.27	1	0.67	53	35.33
\$193.08	1	0.67	54	36.00
\$193.94	1	0.67	55	36.67
\$195.20	1	0.67	56	37.33
\$196.95	1	0.67	57	38.00
\$197.30	1	0.67	58	38.67
\$197.92	1	0.67	59	39.33
\$198.75	1	0.67	60	40.00
\$199.06	1	0.67	61	40.67
\$199.17	1	0.67	62	41.33

Sales_Transaction				
Sales_Transaction	Frequency	Percent	Cumulative Frequency	Cumulative Percent
\$199.47	1	0.67	63	42.00
\$200.46	1	0.67	64	42.67
\$202.09	1	0.67	65	43.33
\$202.65	1	0.67	66	44.00
\$202.89	1	0.67	67	44.67
\$203.58	1	0.67	68	45.33
\$203.65	1	0.67	69	46.00
\$204.35	1	0.67	70	46.67
\$205.30	1	0.67	71	47.33
\$208.06	1	0.67	72	48.00
\$210.01	1	0.67	73	48.67
\$210.36	1	0.67	74	49.33
\$211.91	1	0.67	75	50.00
\$212.01	1	0.67	76	50.67
\$212.06	1	0.67	77	51.33
\$215.06	1	0.67	78	52.00
\$215.28	1	0.67	79	52.67
\$220.75	1	0.67	80	53.33
\$222.79	1	0.67	81	54.00
\$223.56	1	0.67	82	54.67
\$223.94	1	0.67	83	55.33
\$224.79	2	1.33	85	56.67
\$226.49	1	0.67	86	57.33
\$227.89	1	0.67	87	58.00
\$232.43	1	0.67	88	58.67
\$232.51	1	0.67	89	59.33
\$234.69	1	0.67	90	60.00
\$235.11	1	0.67	91	60.67
\$238.06	1	0.67	92	61.33
\$243.60	1	0.67	93	62.00
\$243.89	1	0.67	94	62.67
\$244.48	1	0.67	95	63.33
\$245.12	1	0.67	96	64.00
\$245.99	1	0.67	97	64.67
\$247.30	1	0.67	98	65.33
\$248.14	1	0.67	99	66.00
\$254.45	1	0.67	100	66.67
\$254.96	1	0.67	101	67.33
\$257.89	1	0.67	102	68.00
\$258.39	1	0.67	103	68.67
\$261.14	1	0.67	104	69.33
\$262.94	1	0.67	105	70.00
\$263.50	1	0.67	106	70.67
\$269.67	1	0.67	107	71.33
\$270.69	1	0.67	108	72.00
\$271.55	1	0.67	109	72.67
\$271.74	1	0.67	110	73.33
\$272.12	1	0.67	111	74.00
\$273.45	1	0.67	112	74.67
\$274.65	1	0.67	113	75.33
\$275.68	1	0.67	114	76.00
\$276.48	1	0.67	115	76.67
\$276.84	1	0.67	116	77.33
\$290.44	1	0.67	117	78.00
\$298.88	1	0.67	118	78.67
\$300.62	1	0.67	119	79.33
\$301.20	1	0.67	120	80.00
\$302.46	1	0.67	121	80.67
\$304.72	1	0.67	122	81.33
\$311.57	1	0.67	123	82.00
\$315.75	1	0.67	124	82.67
\$317.22	1	0.67	125	83.33
\$317.72	1	0.67	126	84.00
\$320.72	1	0.67	127	84.67
\$321.67	1	0.67	128	85.33
\$328.55	1	0.67	129	86.00
\$329.03	1	0.67	130	86.67
\$332.56	1	0.67	131	87.33
\$336.69	1	0.67	132	88.00
\$337.44	1	0.67	133	88.67
\$340.49	1	0.67	134	89.33
\$345.67	1	0.67	135	90.00
\$345.92	1	0.67	136	90.67
\$349.30	1	0.67	137	91.33
\$353.79	1	0.67	138	92.00
\$357.73	1	0.67	139	92.67
\$371.50	1	0.67	140	93.33
\$378.43	1	0.67	141	94.00
\$397.87	1	0.67	142	94.67
\$403.20	1	0.67	143	95.33
\$407.94	1	0.67	144	96.00
\$431.05	1	0.67	145	96.67
\$433.44	1	0.67	146	97.33
\$433.71	1	0.67	147	98.00

Sales_Transaction				
Sales_Transaction	Frequency	Percent	Cumulative Frequency	Cumulative Percent
\$453.40	1	0.67	148	98.67
\$498.23	1	0.67	149	99.33
\$790.31	1	0.67	150	100.00

The MEANS Procedure

Variable	Label	Minimum	Maximum	Mean	Median	Mode	Skewness
Observations	Observations	1.0000000	150.0000000	75.5000000	75.5000000	.	0
Sales_Transaction	Sales_Transaction	17.8900000	790.3100000	230.3632014	211.9597152	109.8700000	1.5288446
Family_Income	Family_Income	62712.00	257678.00	106889.93	95516.00	70046.00	1.4577758
Family_Size	Family_Size	1.0000000	6.0000000	2.0800000	2.0000000	1.0000000	1.1840435
Number_of_items	Number_of_items	3.0000000	97.0000000	27.9933333	26.5000000	8.0000000	0.8447895
Number_of_Vehicles	Number_of_Vehicles	0	5.0000000	1.6533333	1.5000000	1.0000000	0.3057502
Distance_to_Store	Distance_to_Store	0	19.0000000	4.8266667	2.0000000	1.0000000	1.2659385

The UNIVARIATE Procedure
Variable: Observations (Observations)

Moments			
N	150	Sum Weights	150
Mean	75.5	Sum Observations	11325
Std Deviation	43.445368	Variance	1887.5
Skewness	0	Kurtosis	-1.2
Uncorrected SS	1136275	Corrected SS	281237.5
Coeff Variation	57.5435338	Std Error Mean	3.54729944

Basic Statistical Measures			
Location		Variability	
Mean	75.50000	Std Deviation	43.44537
Median	75.50000	Variance	1888
Mode	.	Range	149.00000
		Interquartile Range	75.00000

Tests for Location: Mu0=0				
Test		Statistic	p Value	
Student's t	t	21.2838	Pr > t	<.0001
Sign	M	75	Pr >= M	<.0001
Signed Rank	S	5662.5	Pr >= S	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	150.0
99%	149.0
95%	143.0
90%	135.5
75% Q3	113.0
50% Median	75.5
25% Q1	38.0
10%	15.5
5%	8.0
1%	2.0
0% Min	1.0

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
1	1	146	146
2	2	147	147
3	3	148	148
4	4	149	149
5	5	150	150

The UNIVARIATE Procedure
Variable: Sales_Transaction (Sales_Transaction)

Moments			
N	150	Sum Weights	150
Mean	230.363201	Sum Observations	34554.4802
Std Deviation	98.2322083	Variance	9649.56675
Skewness	1.5288446	Kurtosis	6.34931129
Uncorrected SS	9397866.13	Corrected SS	1437785.45
Coeff Variation	42.6423178	Std Error Mean	8.02062622

Basic Statistical Measures			
Location		Variability	
Mean	230.3632	Std Deviation	98.23221
Median	211.9597	Variance	9650
Mode	109.8700	Range	772.42000
		Interquartile Range	104.09384

Note: The mode displayed is the smallest of 2 modes with a count of 2.

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	28.72135	Pr > t	<.0001
Sign	M	75	Pr >= M	<.0001
Signed Rank	S	5662.5	Pr >= S	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	790.310
99%	498.230
95%	403.200
90%	345.793
75% Q3	274.650
50% Median	211.960
25% Q1	170.556
10%	119.944
5%	97.850
1%	57.390
0% Min	17.890

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
17.89	138	433.443	98
57.39	132	433.709	39
67.45	120	453.400	129
75.00	106	498.230	139
78.64	123	790.310	143

The UNIVARIATE Procedure
Variable: Family_Income (Family_Income)

Moments			
N	150	Sum Weights	150
Mean	106889.933	Sum Observations	16033490
Std Deviation	33056.9741	Variance	1092763537
Skewness	1.45777583	Kurtosis	3.91034219
Uncorrected SS	1.87664E12	Corrected SS	1.62822E11
Coeff Variation	30.9261809	Std Error Mean	2699.09063

Basic Statistical Measures			
Location		Variability	
Mean	106889.9	Std Deviation	33057
Median	95516.0	Variance	1092763537
Mode	70046.0	Range	194966
		Interquartile Range	45162

Note: The mode displayed is the smallest of 3 modes with a count of 2.

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	39.6022	Pr > t	<.0001
Sign	M	75	Pr >= M	<.0001
Signed Rank	S	5662.5	Pr >= S	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	257678
99%	254500
95%	165450
90%	145118
75% Q3	127275
50% Median	95516
25% Q1	82113
10%	71884
5%	70298
1%	65508
0% Min	62712

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
62712	138	172141	1
65508	102	172500	148
68793	143	175879	118
69750	131	254500	129
70046	101	257678	139

The UNIVARIATE Procedure
Variable: Family_Size (Family_Size)

Moments			
N	150	Sum Weights	150
Mean	2.08	Sum Observations	312
Std Deviation	1.28240546	Variance	1.64456376
Skewness	1.18404355	Kurtosis	0.56350855
Uncorrected SS	894	Corrected SS	245.04
Coeff Variation	61.6541086	Std Error Mean	0.10470797

Basic Statistical Measures			
Location		Variability	
Mean	2.080000	Std Deviation	1.28241
Median	2.000000	Variance	1.64456
Mode	1.000000	Range	5.00000
		Interquartile Range	2.00000

Tests for Location: Mu0=0				
Test		Statistic	p Value	
Student's t	t	19.86477	Pr > t	<.0001
Sign	M	75	Pr >= M	<.0001
Signed Rank	S	5662.5	Pr >= S	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	6
99%	6
95%	5
90%	4
75% Q3	3
50% Median	2
25% Q1	1
10%	1
5%	1
1%	1
0% Min	1

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
1	147	5	82
1	146	5	85
1	143	5	118
1	142	6	129
1	138	6	139

The UNIVARIATE Procedure
Variable: Number_of_items (Number_of_items)

Moments			
N	150	Sum Weights	150
Mean	27.9933333	Sum Observations	4199
Std Deviation	18.1564774	Variance	329.657673
Skewness	0.84478946	Kurtosis	0.9468464
Uncorrected SS	166663	Corrected SS	49118.9933
Coeff Variation	64.8600052	Std Error Mean	1.48247018

Basic Statistical Measures			
Location		Variability	
Mean	27.99333	Std Deviation	18.15648
Median	26.50000	Variance	329.65767
Mode	8.00000	Range	94.00000
		Interquartile Range	29.00000

Tests for Location: Mu0=0				
Test		Statistic	p Value	
Student's t	t	18.8829	Pr > t	<.0001
Sign	M	75	Pr >= M	<.0001
Signed Rank	S	5662.5	Pr >= S	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	97.0
99%	88.0
95%	56.0
90%	50.0
75% Q3	41.0
50% Median	26.5
25% Q1	12.0
10%	8.0
5%	4.0
1%	3.0
0% Min	3.0

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
3	146	65	30
3	143	68	54
3	138	78	39
3	126	88	59
4	147	97	98

The UNIVARIATE Procedure
Variable: Number_of_Vehicles (Number_of_Vehicles)

Moments			
N	150	Sum Weights	150
Mean	1.65333333	Sum Observations	248
Std Deviation	1.00992834	Variance	1.01995526
Skewness	0.30575021	Kurtosis	-0.385151
Uncorrected SS	562	Corrected SS	151.973333
Coeff Variation	61.0843756	Std Error Mean	0.0824603

Basic Statistical Measures			
Location		Variability	
Mean	1.653333	Std Deviation	1.00993
Median	1.500000	Variance	1.01996
Mode	1.000000	Range	5.00000
		Interquartile Range	1.00000

Tests for Location: Mu0=0				
Test		Statistic	p Value	
Student's t	t	20.05005	Pr > t	<.0001
Sign	M	67	Pr >= M	<.0001
Signed Rank	S	4522.5	Pr >= S	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	5.0
99%	4.0
95%	3.0
90%	3.0
75% Q3	2.0
50% Median	1.5
25% Q1	1.0
10%	0.0
5%	0.0
1%	0.0
0% Min	0.0

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
0	147	3	140
0	143	3	148
0	132	3	150
0	128	4	129
0	126	5	139

The UNIVARIATE Procedure
Variable: Distance_to_Store (Distance_to_Store)

Moments			
N	150	Sum Weights	150
Mean	4.82666667	Sum Observations	724
Std Deviation	5.17576524	Variance	26.7885459
Skewness	1.26593853	Kurtosis	0.41001904
Uncorrected SS	7486	Corrected SS	3991.49333
Coeff Variation	107.232705	Std Error Mean	0.42259946

Basic Statistical Measures			
Location		Variability	
Mean	4.826667	Std Deviation	5.17577
Median	2.000000	Variance	26.78855
Mode	1.000000	Range	19.00000
		Interquartile Range	7.00000

Tests for Location: Mu0=0				
Test		Statistic	p Value	
Student's t	t	11.42137	Pr > t	<.0001
Sign	M	71	Pr >= M	<.0001
Signed Rank	S	5076.5	Pr >= S	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	19
99%	19
95%	16
90%	14
75% Q3	8
50% Median	2
25% Q1	1
10%	1
5%	0
1%	0
0% Min	0

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
0	143	18	24
0	138	18	26
0	137	18	88
0	135	19	5
0	131	19	52

The ANOVA Procedure

Class Level Information		
Class	Levels	Values
Family_Income	147	\$62,712 \$65,508 \$68,793 \$69,750 \$70,046 \$70,189 \$70,298 \$70,334 \$71,193 \$71,250 \$71,568 \$71,648 \$71,737 \$71,765 \$72,003 \$72,413 \$73,008 \$73,225 \$73,542 \$73,725 \$74,009 \$74,193 \$74,481 \$75,117 \$75,906 \$75,942 \$77,008 \$77,115 \$79,341 \$79,702 \$79,729 \$80,080 \$80,541 \$81,689 \$81,861 \$82,087 \$82,113 \$82,138 \$82,583 \$82,585 \$82,628 \$82,783 \$82,898 \$82,942 \$83,166 \$83,854 \$84,023 \$84,099 \$85,280 \$86,185 \$86,543 \$86,762 \$86,909 \$87,004 \$87,070 \$87,488 \$87,733 \$88,234 \$88,371 \$89,765 \$90,543 \$90,899 \$91,021 \$91,032 \$91,324 \$91,812 \$91,861 \$92,229 \$92,251 \$92,582 \$92,773 \$93,194 \$93,532 \$95,500 \$95,532 \$97,511 \$98,725 \$100,000 \$101,345 \$101,351 \$103,012 \$107,359 \$107,443 \$111,318 \$111,345 \$111,943 \$112,257 \$112,576 \$112,862 \$114,622 \$116,628 \$117,565 \$118,201 \$118,580 \$119,911 \$120,569 \$121,268 \$121,292 \$121,372 \$121,573 \$121,625 \$122,335 \$123,296 \$123,457 \$123,556 \$123,674 \$125,058 \$125,378 \$125,745 \$126,541 \$127,275 \$127,294 \$127,797 \$130,137 \$130,818 \$131,337 \$132,422 \$133,674 \$134,071 \$134,087 \$134,373 \$135,549 \$135,723 \$136,723 \$137,562 \$140,138 \$141,235 \$141,302 \$142,738 \$143,403 \$143,723 \$144,531 \$144,983 \$145,252 \$145,432 \$145,916 \$145,998 \$147,031 \$155,117 \$162,141 \$165,450 \$167,453 \$172,141 \$172,500 \$175,879 \$254,500 \$257,678

Number of Observations Read	150
Number of Observations Used	150

The ANOVA Procedure

Dependent Variable: Sales_Transaction Sales_Transaction

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	146	1434069.195	9822.392	7.93	0.0555
Error	3	3716.251	1238.750		
Corrected Total	149	1437785.446			

R-Square	Coeff Var	Root MSE	Sales_Transaction Mean
0.997415	15.27843	35.19589	230.3632

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Family_Income	146	1434069.195	9822.392	7.93	0.0555





