

```

1      OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
68
69      * AST 503
70      Program 5
71      Zainab Akinjobi
72      Questionnaire data with missing values
73
74      cs1 = customer satisfaction 1
75      cs2 = customer satisfaction 2 and so on ...
76
77      There are 3 scales
78      ( cust satisfaction , acculturation ,
79      political stance ) ;
80
81
82
83      data mydata ;
84
85      input name $ 1-7 age 10-11 gender $ 16
86
87      @20 (cs1- cs7 ) ( 1.0)
88
89      @30 (acc1 - acc8) (1.0 )
90
91      @40 ( v1 - v4 ) ( $1.0 ) ;
92      * At space 20, read in 7 items with one spacing
93      At space 40 ,read v1 - v4 with one spacing between the characters;
94
95
96      Cust_satis = ( cs1 + cs2 + cs3 + cs4 + cs5 + cs6 + cs7) / 7 ;
97      * This is used to calculate the mean when there are no missing values;
98
99      accultur = mean( of acc1 acc2 acc3 acc4 acc5 acc6 acc7 acc8 ) ;
100     * This is used to calculate the mean when there are missing values;
101
102
103     vv1 = Rank (v1) - 96 ;
104     vv2 = Rank (v2) - 96 ;
105     vv3 = Rank (v3) - 96 ;
106     vv4 = Rank (v4) - 96 ;
107     *v1 is the variable
108     vv1 is the conversion;
109
110     scale3 = mean ( of vv1 vv2 vv3 vv4 ) ;
111
112
113
114     datalines ;

```

NOTE: Missing values were generated as a result of performing an operation on missing values.  
Each place is given by: (Number of times) at (Line):(Column).  
1 at 96:21

NOTE: The data set WORK.MYDATA has 10 observations and 29 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             735.90k
OS Memory          26276.00k
Timestamp          12/13/2021 03:27:05 AM
Step Count                     89  Switch Count  2
Page Faults                    0
Page Reclaims                 131
Page Swaps                    0
Voluntary Context Switches     11
Involuntary Context Switches   0

```

```

Block Input Operations      0
Block Output Operations    264

```

```

125      ;
126
127
128
129      proc contents data = mydata ;
130      *proc content is used to ensure that all the data variables are in reasonable format;
131
132
133

```

NOTE: PROCEDURE CONTENTS used (Total process time):

```

real time      0.05 seconds
user cpu time  0.05 seconds
system cpu time 0.00 seconds
memory         1862.93k
OS Memory      26536.00k
Timestamp      12/13/2021 03:27:05 AM
Step Count          90  Switch Count  0
Page Faults         0
Page Reclaims      127
Page Swaps          0
Voluntary Context Switches 0
Involuntary Context Switches 1
Block Input Operations 0
Block Output Operations 24

```

```

134      proc print data = mydata ;
135      var cs1 - cs3 cust_satis acc1 - acc4 accultur vv1 - vv4 v1 ;
136      title1 ' print a portion of the q-aire data ';
137
138
139
140

```

NOTE: There were 10 observations read from the data set WORK.MYDATA.

NOTE: PROCEDURE PRINT used (Total process time):

```

real time      0.03 seconds
user cpu time  0.03 seconds
system cpu time 0.00 seconds
memory         892.78k
OS Memory      26276.00k
Timestamp      12/13/2021 03:27:06 AM
Step Count          91  Switch Count  1
Page Faults         0
Page Reclaims      66
Page Swaps          0
Voluntary Context Switches 10
Involuntary Context Switches 0
Block Input Operations 0
Block Output Operations 0

```

```

141      proc means data = mydata mean median n ;
142      var cust_satis accultur scale3 ;
143      title1 ' means and medians of q-airre data ';
144

```

NOTE: There were 10 observations read from the data set WORK.MYDATA.

NOTE: PROCEDURE MEANS used (Total process time):

```

real time      0.02 seconds
user cpu time  0.02 seconds
system cpu time 0.01 seconds
memory         6663.56k

```

```

OS Memory          32184.00k
Timestamp          12/13/2021 03:27:06 AM
Step Count         92  Switch Count  2
Page Faults        0
Page Reclaims      1480
Page Swaps         0
Voluntary Context Switches  22
Involuntary Context Switches 0
Block Input Operations  0
Block Output Operations  8

```

```

145      proc contents data = mydata ;
146
147

```

NOTE: PROCEDURE CONTENTS used (Total process time):

```

real time          0.05 seconds
user cpu time      0.05 seconds
system cpu time    0.00 seconds
memory            983.59k
OS Memory          27304.00k
Timestamp          12/13/2021 03:27:06 AM
Step Count         93  Switch Count  0
Page Faults        0
Page Reclaims      93
Page Swaps         0
Voluntary Context Switches  0
Involuntary Context Switches 0
Block Input Operations  0
Block Output Operations  40

```

```

148      proc sgplot data = mydata ;
149      scatter x = cust_satis y = accultur ;
150      title1 'scatter plot of scale1 vs scale2 ' ;
151
152      run;

```

NOTE: PROCEDURE SGPLOT used (Total process time):

```

real time          0.15 seconds
user cpu time      0.04 seconds
system cpu time    0.01 seconds
memory            7886.12k
OS Memory          33580.00k
Timestamp          12/13/2021 03:27:06 AM
Step Count         94  Switch Count  2
Page Faults        0
Page Reclaims      1792
Page Swaps         0
Voluntary Context Switches  146
Involuntary Context Switches 0
Block Input Operations  0
Block Output Operations  464

```

NOTE: There were 10 observations read from the data set WORK.MYDATA.

```

153
154      OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
164

```