Proc tabulate

- displays descriptive statistics in tabular format
- can create variety of tables ranging from simple to complex and highly customized
- computes many of same statistics reported from proc means and proc freq
- flexibility in classifying values of variables and establishing a hierarchical relationship between variables
- mechanism for labeling and formatting variables and procedure-generated statistics

Example 1


PROC TABULATE Sample
------------------------

USAGE: User would like to format the CLASS variables and ANALYSIS variables.

METHOD: Use a FORMAT statement to format the CLASS variables. Use the format modifier on the TABLE statement to format the analysis variables.

DATE CREATED: 2-19-97

SAMPLE CODE:

data sales;
  input name $ region $ product $ sales;
cards;
SMITH A CANDY 22000.
SMITH A CHIPS 10000.
JONES A CANDY 25000.
JONES A CHIPS 5000.
JOHNSON B CANDY 12000.
JOHNSON B CHIPS 15000.
ADAMS B CANDY 10000.
ADAMS B CHIPS 8000.
;
proc format; /* Create user-defined format */
  value $fmtx 'A'='CARY'
    'B'='RALEIGH';

proc tabulate data=sales;
  /* Use FORMAT stmt. to assign format to CLASS variable */
  /* Use *F= to assign a format to an ANALYSIS variable */
  format region $fmtx.;
class name region;
var sales;
table region*name, sales*(sum n)*f=comma8.;
run ;
Example 2

PROC TABULATE Sample

USAGE: User has data derived from a multiple choice questionaire. They would like to get frequency counts of the response for each question.

METHOD: Manipulate the data so that TABULATE receives one CLASS variable for responses instead of four. Also, create a new answer variable. Place both variables on the CLASS statement.

DATE CREATED: 2-19-97

SAMPLE CODE:

data old;
input q1 $ q2 $ q3 $ q4 $;
cards;
A B C D
E F A E
C B B A
B A D E
E F A B
A A A C
F E A E
;
data new;
  set old;
  q='Question 1'; ans=q1; output;
  q='Question 2'; ans=q2; output;
  q='Question 3'; ans=q3; output;
  q='Question 4'; ans=q4; output;
drop q1-q4;
run;

proc tabulate data=new format=1.0;
class q ans;
table q=' ', ans='CHOICES' n=' ' / misstext='0';
runtime;
Example 3

options ls=72;

data timerec;
   input employee $ week $ phase $ hours;
cards;
Chen 11SEP89 Analysis 8
Chen 11SEP89 Analysis 7
Chen 11SEP89 Coding 2.5
Chen 11SEP89 Testing 8
Chen 11SEP89 Coding 8.5
Chen 11SEP89 Testing 6
Chen 11SEP89 Coding 4
Stewart 11SEP89 Coding 8
Stewart 11SEP89 Testing 4.5
Stewart 11SEP89 Coding 4.5
Stewart 11SEP89 Coding 10.5
Stewart 11SEP89 Testing 10
run;

proc tabulate data=timerec format=8.1;
   class employee week phase;
   var hours;
   table week, employee all, sum*hours=' '*(phase all);
   table week, employee all, pctsum*hours=' '*(phase all);
   keylabel sum='Total Hours'
      pctsum='Percentage of Hours';
   title 'Summary of Project Hours';
run;

proc tabulate data=timerec format=8.1;
   class employee week phase;
   var hours;
   table week, employee all, sum*hours=' '*(phase all);
   table week, employee all, pctsum*hours=' '*(phase all);
   keylabel sum='Total Hours'
      pctsum='Percentage of Hours';
   title 'Summary of Project Hours';
run;