Q1. In Pharmaceutical Research tables, what would you expect the CLASS variable to be?

Ans:-Class refers to Categorical variable. Basically to categorize data in different groups or classes.

For e.g.:-Sex, Gender, Treatment arm.

Q2. Which MoSTO macro would you recommend to use for demographic data?

Ans:- %desc\_freq\_tab becoz on basis of each usubjid it will give us information like n,mean, max

i.e. both descriptive statistics and frequency statistics.

Q3. Name at least two domains where %DESC\_TAB is expected to be used for reporting.

Ans:-ADVS dataset-Change from baseline by visit. ADEGM -Change from baseline by visit(safety analysis population)

Q4. Both %FREQ\_TAB and %INCIDENCE\_PRINT present frequencies – what is the important difference between them?

Ans:- %INCIDENCE\_PRINT produces frequencies for especially adverse event data. %FREQ\_TAB produces frequency distribution of variables.

Q5. When using %NSERTOPTION macro, what kind of variable would you prefer to center-align?

Ans:-For ADAE dataset e.g.: AEDECOD ,AESEV or AEREL.

Q6. From purely visual point of view, what are advantages and disadvantages of defining variable as PAGE, as opposed to BY?

Ans:- Advantage :-data in the listing is sorted by the internal values of the PAGE variables. Disadvantage -a change in the value of any of the PAGE variables causes a page break. In RTF output, this break also causes a break of the logical table.

Q7. Parameters FREELINE and TOGETHER usually have the same value. Why is it so?

Ans:- FREELINE is used to specify a BY variable, for which an empty line is inserted between the values.

If values of BY variables is required to be listed together on one page then together is used. That is why they have same values.

Q8. What kind of situations makes adding HSPLIT symbol to labels necessary?

Ans:- To split of headers explicitly set by programmers , make the column name as small as possible and at same time making labels readable .

Q9. Parameter TOTAL is defaulted to YES. What would necessarily make you change it to NO?

Ans:- On using macro like %desc\_tab ,want to produce only descriptive statistics but not total count of each variable

Q10. While working on a contraception drug, you are asked to produce a pregnancy report. Which MoSTO macro will you recommend?

Ans:-%Datalist

**EXERCISE1**

%initsystems(initstudy = 4, mosto = 7, spro = 3, adamap = 1, definexml = 1, p21e = 1, gral = 4, eva = 1, dtools = 2, cars = 1, woops = 1, poster=1, valir=1) ;

%initstudy(

iniProgram =

, iniAreaSubDir =

, includeADSFrom =

, iniDrive =/\* &drive.\*/ /var/swan/root/bhc/general/playground

, display\_formats = N

, inimode = ANALYSIS

);

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Bayer AG

\* Study : Training of TLF

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*Name of program\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

%iniprog(name = t\_14\_1);

/\*

\* Purpose : ##########

\* Programming Spec :

\* Validation Level : 1 - Verification by Review

\* SAS Version : Linux 9.4

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Pre-conditions :

\* Post-conditions :

\* Comments :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Author(s) : gngtf (Parnika Srivastava) / date: 07JUN2023

\* Reference prog :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

data cars (KEEP= Origin Make Model MSRP Invoice EngineSize Cylinders HorsePower);

set sashelp.cars;

where Make in ("Infiniti", "Kia", "Lexus", "Mitsubishi", "Nissan", "Scion", "Subaru", "Suzuki", "Toyota")

and strip(Model) in ("FX35" , "FX45","Rio Cinco","IS 300 SportCross","Lancer Sportback LS","Murano SL","xB","Forester X","Outback",

"Aerio SX", "Matrix XR");

run;

%set\_titles\_footnotes(

tit1 = "Listing of all Wagon Cars by region and manufacturer"

)

%datalist(

data = cars

, page =Origin

, by =Make

, sidebyside =

, var = Make Model MSRP Invoice EngineSize Cylinders HorsePower

, postvar =

, contby =

, order =Make

, order\_var =

, tablesby =

, collate\_seq = NO

, ncolumn1 =

, transpose =

, freeline =Make

, together =

, optimal = NO

, maxlen = 20

, repby = NO

, space = 5

, splitby = YES

, split = '/ \*'

, hsplit =

, label = YES

, layout = STANDARD

, bylen =

, vertical\_header =

, ignore\_prespace = NO

, print\_empty = YES

, hb\_align = CENTER

, hv\_align = CENTER

, hc\_align =

, hn\_align =

, outdat\_meta\_lib =

, store\_fmt\_cat = NO

, shells = NO

, shell\_maxobs =

, shell\_replace\_by = NO

);

%endprog;

EXERCISE-2

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Bayer AG

\* Study : Training of TLF

\* Proj/Subst/GIAD : training /

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*Name of program\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

%iniprog(

name = t\_14\_2

, log2file =

, print2file = Y

, createRTF =

, cleanWork = Y

, cleanTitlesFoot = Y

, addTS2Log = N

, verbose = Y

);

/\*

\* Purpose : ##########

\* Programming Spec :

\* Validation Level : 1 - Verification by Review

\* SAS Version : Linux 9.4

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Pre-conditions :

\* Post-conditions :

\* Comments :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Author(s) : gngtf (Parnika Srivastava) / date: 06JUN2023

\* Reference prog :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

data cars (KEEP=Type Horsepower Weight Length Wheelbase);

set sashelp.cars;

where Origin="Asia";

RUN;

%set\_titles\_footnotes(

tit1 = "Descriptive statistics for physical characteristics of Asian cars"

)

%desc\_tab(

data = cars

, data\_n =

, var = Horsepower Weight Length Wheelbase

, stat = MIN MEAN MAX

, alpha\_ci = 0.5

, by =

, inby =

, page =

, sidebyside =

, data\_n\_ignore =

, order =

, class = Type

, class\_order =

, total = NO

, round\_factor = 1

, round\_limit = 1

, round\_type = DECIMAL

, completevar =

, code99x = NO

, print = PORTRAIT

, vlabel = YES

, out = DESC\_TAB

, baseline =

, baseline\_var =

, compare\_var =

, baseline\_pre =

, absbase =

, time =

, visittext = Visit

, baselinetext = Baseline

, subject =

, p\_method =

, p\_method\_var =

, p\_method\_foot = NO

, samecont = YES

, stratum =

, outdat =

, harmonized\_outdat = Yes

, tablesby =

, layout = STANDARD

, arithm\_label = NO

, optimal = YES

, maxlen = 34

, space = 2

, split =

, hsplit =

, vertical\_header =

, ignore\_prespace = YES

, hb\_align = CENTER

, hv\_align = CENTER

, hc\_align =

, hn\_align =

, freeline = <default>

, together = <default>

, print\_empty = YES

, order\_var =

, repby = NO

, splitby = YES

, label = NO

, bylen =

, contby =

);

/\* Use %endprog at the end of each study program \*/

%endprog;

EXERCISE-3

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Bayer AG

\* Study : Training of TLF

\* Proj/Subst/GIAD : training /

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*Name of program\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

%iniprog(name = t\_14\_3);

/\*

\* Purpose : ##########

\* Programming Spec :

\* Validation Level : 1 - Verification by Review

\* SAS Version : Linux 9.4

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Pre-conditions :

\* Post-conditions :

\* Comments :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Author(s) : gngtf (Parnika Srivastava) / date: 07JUN2023

\* Reference prog :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

data cars (KEEP=Origin Type DriveTrain);

set sashelp.cars;

RUN;

%set\_titles\_footnotes(

tit1 = "Distribution of car design types of region "

)

%freq\_tab(

data = cars

, data\_n =

, var = Type DriveTrain

, subject =

, page =

, by =

, sidebyside =

, inby =

, data\_n\_ignore =

, total = Yes

, totalby =

, totaltxt = Total

, order =

, class = Origin

, class\_order =

, zeropct = NO

, percentage\_decimals = 1

, freqoption = ALL

, basepct = N

, hlabel = NO

, levlabel = NO

, dintable = NO

, incln = NO

, desc = NO

, header\_bign = YES

, misstext = missing

, subjectlabel = n

, p\_method =

, p\_method\_var =

, p\_method\_foot = NO

, samecat = YES

, stratum =

, outdat =

, harmonized\_outdat = NO

, missing = YES

, complete = NONE

, print = PORTRAIT

, code99x = NO

, completeclass = NO

, tablesby =

, layout = STANDARD

, optimal = NO

, maxlen = 20

, space = 2

, split = '/ \*'

, hsplit =

, vertical\_header =

, ignore\_prespace = NO

, hb\_align = CENTER

, hv\_align = CENTER

, hc\_align =

, hn\_align =

, freeline = <default>

, together = <default>

, print\_empty = YES

, order\_var =

, repby = NO

, splitby = NO

, label = NO

, bylen =

, contby =

);

%endprog;

EXERCISE-4

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Bayer AG

\* Study : Training of TLF

\* Proj/Subst/GIAD : training /

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*Name of program\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

%iniprog(name = t\_14\_4);

/\*

\* Purpose : ##########

\* Programming Spec :

\* Validation Level : 1 - Verification by Review

\* SAS Version : Linux 9.4

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Pre-conditions :

\* Post-conditions :

\* Comments :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Author(s) : gngtf (Parnika Srivastava) / date: 07JUN2023

\* Reference prog :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

data cars (Keep=Make Origin MSRP Manufacturer Model DriveTrain Comb);

set sashelp.cars;

Comb=Model||"-"||DriveTrain;

Rename Type=Manufacturer;

RUN;

%set\_titles\_footnotes(

tit1 = "Availability of cars under $12,000 by region and manufacturer"

)

%incidence\_print(

data = cars

, data\_n = cars

, subject = Comb

, page =

, by =

, sidebyside =

, var = Origin Make

, inby =

, data\_n\_ignore =

, categor =

, class = Manufacturer

, class\_order =

, outpat =

, harmonized\_outdat = Yes

, triggercond = MSRP<12000

, contind =

, sortid =

, p\_method =

, p\_ignore\_missing = NO

, p\_method\_foot = NO

, total = Yes

, zeropct = NO

, percentage\_decimals = 1

, sumcount = YES

, events = NO

, totalcat = YES

, misstext = missing

, complete = NO

, completeclass = NO

, completevar =

, code99xhandling = DEFAULT

, code99x = NO

, transcat = NO

, threshold = 0

, threshold\_class\_value =

, percentage\_range =

, sortorder = CODE

, sortseq = DESCENDING

, frqclass =

, frqsidebyside = SIDEBYSIDE

, frqvar =

, evlabel = Manufacturer

, anytxt =

, uncodedtxt = Any Car under $12K

, uncodedwarn = YES

, eventstxt =

, maxcattxt = Maximum

, order =

, outdat =

, tablesby =

, layout = STANDARD

, optimal = NO

, maxlen = 80

, space = 2

, split = '/ \*'

, hsplit = <default>

, vertical\_header =

, ignore\_prespace = NO

, hb\_align = LEFT

, hv\_align = CENTER

, hc\_align =

, hn\_align =

, freeline = <default>

, together = <default>

, print\_empty = YES

, order\_var =

, repby = NO

, splitby = YES

, label = YES

, bylen =

, contby = <default>

)

%endprog;

EXERCISE-5

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Bayer AG

\* Study : Training of TLF

\* Proj/Subst/GIAD : training /

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*Name of program\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

%iniprog(name = t\_14\_5);

/\*

\* Purpose : ##########

\* Programming Spec :

\* Validation Level : 1 - Verification by Review

\* SAS Version : Linux 9.4

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Pre-conditions :

\* Post-conditions :

\* Comments :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Author(s) : gngtf (Parnika Srivastava) / date: 07JUN2023

\* Reference prog :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

data cars (Keep=Origin Comb MSRP Invoice Diff);

set sashelp.cars;

Length Price $ 24;

Comb=Model||"-"||DriveTrain;

Diff= MSRP-Invoice;

/\* if Diff <300 then Price="less than $300";\*/

/\* if Diff=>300<1000 then Price="$300 upto $1000" ;\*/

/\* if Diff=>1000<2000 then Price="$1000 upto $2000";\*/

/\* if Diff=>2000<3000 then Price="$2000 upto $3000";\*/

/\* if Diff=>3000 then Price="$3000 and above";\*/

RUN;

%set\_titles\_footnotes(

tit1 = "Difference Between MSRP and Invoice price by region "

)

%overview\_tab(

data = cars(where=(not missing(Diff)))

, data\_n =

, class = Origin

, class\_order =

, by =

, sidebyside =

, page =

, order =

, transpose = NO

, missing = YES

, misstext = missing

, subject = Comb

, total = NO

, groups = "Diff <300" \*"less than $300"

"Diff>300 and Diff<1000" \*"$300 upto $1000"

"Diff ge 1000 and Diff<2000" \*"$1000 upto $2000"

"Diff ge 2000 and Diff<3000 " \*"$2000 upto $3000"

"Diff ge 3000" \*"$3000 and above"

, groupstxt =

, code99xhandling = DEFAULT

, n\_group = 0

, complete = NONE

, freqoption = ALL

, zeropct = NO

, percentage\_decimals = 1

, code99x = NO

, outdat =

, harmonized\_outdat = NO

, tablesby =

, optimal = NO

, maxlen = 50

, space = 2

, split = '/ \*'

, hsplit =

, layout = STANDARD

, vertical\_header =

, ignore\_prespace = NO

, hb\_align = CENTER

, hv\_align = CENTER

, hc\_align =

, hn\_align =

, freeline =

, together = fline

, print\_empty = YES

, order\_var =

, repby = NO

, splitby = YES

, label = NO

, bylen =

, contby =

);

%endprog;

EXERCISE-6

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Bayer AG

\* Study : Training of TLF

\* Proj/Subst/GIAD : training /

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*Name of program\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

%iniprog(name = t\_14\_6);

/\*

\* Purpose : ##########

\* Programming Spec :

\* Validation Level : 1 - Verification by Review

\* SAS Version : Linux 9.4

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Pre-conditions :

\* Post-conditions :

\* Comments :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Author(s) : gngtf (Parnika Srivastava) / date: 07JUN2023

\* Reference prog :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

/\*create lst with name\*/

%iniprog(name = t\_14\_6, print2file = Y /\*, createRTF = Y\*/);

data cars (KEEP=Origin Type Make Model MSRP Invoice Cylinders HorsePower);

set sashelp.cars;

run;

proc sort data=cars out=cars1;

by Type Origin descending MSRP ;

RUN;

data cars2;

set cars1;

by Type Origin descending MSRP ;

if first.Type then output;

if first.Origin then output;

RUN;

proc sort data = cars2 out=cars3 nodupkey;

by Type Origin;

RUN;

proc sort data = cars3 out=cars4 ;

by Origin;

RUN;

data ca(KEEP=Origin);

set sashelp.cars;

run;

proc sort data=ca nodupkey;

by Origin;

RUN;

%set\_titles\_footnotes(

tit1 = "The most expensive cars manufactured in $Origin$ by Type"

)

%datalist(

data = cars4

, page = Origin

, by =

, sidebyside =

, var = Type Make Model MSRP Invoice Cylinders HorsePower

, postvar =

, contby =

, order =Origin

, order\_var =

, tablesby =ca

, collate\_seq = NO

, ncolumn1 =

, transpose =

, freeline =

, together =

, optimal = NO

, maxlen = 20

, repby = NO

, space = 5

, splitby = YES

, split = '/ \*'

, hsplit =

, label = YES

, layout = STANDARD

, bylen =

, vertical\_header =

, ignore\_prespace = NO

, print\_empty = YES

, hb\_align = CENTER

, hv\_align = CENTER

, hc\_align =

, hn\_align =

, outdat\_meta\_lib =

, store\_fmt\_cat = NO

, shells = NO

, shell\_maxobs =

, shell\_replace\_by = NO

);

%endprog;

EXERCISE-7

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Bayer AG

\* Study : Training of TLF

\* Proj/Subst/GIAD : training /

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*Name of program\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

%iniprog(name = t\_14\_7);

/\*

\* Purpose : ##########

\* Programming Spec :

\* Validation Level : 1 - Verification by Review

\* SAS Version : Linux 9.4

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Pre-conditions :

\* Post-conditions :

\* Comments :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Author(s) : gngtf (Parnika Srivastava) / date: 07JUN2023

\* Reference prog :

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

/\*create lst with name\*/

%iniprog(name = t\_14\_7, print2file = Y /\*, createRTF = Y\*/);

data cars ;

set sashelp.cars;

run;

%set\_titles\_footnotes(

tit1 = "Listing of all Cars"

)

%GLOBAL MostoCalcPercWidth ;

%LET MostoCalcPercWidth = NO;

%insertOptionRTF(namevar= Make,width =13mm, keep = n, overwrite = n,align=l);

%insertOptionRTF(namevar= Model,width =20mm, keep = n, overwrite = n);

%insertOptionRTF(namevar= Type,width =10mm, keep = n, overwrite = n,align=l);

%insertOptionRTF(namevar= Drivetrain,width =12mm, keep = n, overwrite = n,align=l);

%insertOptionRTF(namevar= MSRP,width =12mm, keep = n, overwrite = n,align=l);

%insertOptionRTF(namevar= Cylinders,width =12mm, keep = n, overwrite = n,align=l);

%insertOptionRTF(namevar= HorsePower,width =13mm, keep = n, overwrite = n,align=l);

%LET \_tmp\_MostoCalcPercWidth = &MostoCalcPercWidth;

%LET MostoCalcPercWidth = NO;

%datalist(

data = cars

, page = Origin

, by = Make

, sidebyside =

, var = Model Type Drivetrain MSRP Invoice EngineSize Cylinders HorsePower MPG\_City MPG\_Highway weight Wheelbase Length

, postvar =

, contby =

, order =

, order\_var =

, tablesby =

, collate\_seq = NO

, ncolumn1 =

, transpose =

, freeline = Make

, together = Make

, optimal = NO

, maxlen = 20

, repby = NO

, space = 15

, splitby = YES

, split = '/ \*'

, hsplit =

, label = YES

, layout = STANDARD

, bylen =

, vertical\_header =

, ignore\_prespace = NO

, print\_empty = YES

, hb\_align = CENTER

, hv\_align = CENTER

, hc\_align =

, hn\_align =

, outdat\_meta\_lib =

, store\_fmt\_cat = NO

, shells = NO

, shell\_maxobs =

, shell\_replace\_by = NO

);

%endprog();

For Creating RTF

%startMostoRTF(file = &outdir/t\_14\_7, toc = NO, toctable = NO);

%INCLUDE "&prgdir/t\_14\_7.sas";

%endMostoRTF;