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

* CLASS variable used to define categorical independent variables in the table.

1. Which MoSTO macro would you recommend to use for demographic data?
2. Name at least two domains where %DESC\_TAB is expected to be used for reporting.

* AE, LB

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

* %FREQ\_TAB displays only frequency of one or more variables, however %INCIDENT\_PRINT display frequency of occurrence of specified observation type/event of a variable.

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

* CHARNUM

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

* Using PAGE, we can generate the report with a pagebreak.

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

* TOGETHER keeps all the values/groups in a single page and FREELINE inserts a line between each record, however these options helps us to make cosmetic changes in the output.

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

* To create a custom header (Keeps the header as narrow as possible)

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

* If we are generating descriptive statistics for a group, we can opt TOTAL =NO

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

* %INCIDENCE\_PRINT

Assessment No1. Please produce the following table from **SASHELP.CARS** using both PROC REPORT and %DATALIST:

data cars;

set sashelp.cars;

if type='Wagon' then output;

keep origin Make Model MSRP Invoice EngineSize Cylinders Horsepower;

RUN;

proc sort data=cars;

by origin;

RUN;

title1 'Listing of all Wagon cars by region and manufacturer';

title3 'Origin - #byval(origin)';;

ods rtf file="/var/swan/root/bhc/general/playground/training/12345/stat/query04/dev/results/assess1.rtf" style=journal;;

proc report data= cars headline headskip;

column origin Make Model MSRP Invoice EngineSize Cylinders Horsepower;

by origin;

define origin / order order=internal noprint;

define make / group "MAKE" width=30 ;

define model / order "MODEL" width=20 ;

define msrp / order "MSRP" width=20 ;

define invoice / order "INVOICE" width=10;

define EngineSize / order display "Engine Size (L)" width=30 ;

define Cylinders / order "CYLINDERS" width=22;

define Horsepower / order "HORSEPOWER" width=22 ;

run;

ods rtf close;;

Assessment No2. Please produce the following table from SASHELP.CARS using an appropriate MoSTO macro:

data cars;

set sashelp.cars;

keep type weight length wheelbase Horsepower;

RUN;

title1 "Descriptive statistics for physical characteristics of Asian cars";

%desc\_freq\_tab(

data = cars

, var = horsepower weight length wheelbase

, class = type

, total = NO

, complete = none

, basepct = n\_class

, stat = min mean max

, maxlen = 40

)

%endprog;

Assessment No3. Please produce the following table from SASHELP.CARS using an appropriate MoSTO macro:

data cars;

set sashelp.cars;

keep origin type drivetrain ;

RUN;

title1 "Distribution of car design types by region";

%freq\_tab(

data = cars

, var = type drivetrain

, class = origin

)

%endprog;

Assessment No 4. Please produce the following table from SASHELP.CARS using an appropriate MoSTO macro: **Incidence Report**

data cars;

set sashelp.cars;

new\_var=type;

RUN;

data cars1;

set cars;

if msrp <12000 then output;

RUN;

title1 "Availability of cars under $12,000 by region and manufacturer";

%incidence\_print(

data = cars1

, data\_n = cars

, subject = model msrp

, var = origin make

, class = new\_var

, triggercond = not missing(origin)

, total = yes

, zeropct = no

, events = no

, complete = yes

, completeclass = yes

, transcat = no

, evlabel = Manufacturer

, anytxt = Any car under $12K

, data\_n\_hsplit = NO

, optimal = Yes

, maxlen = 17

, space = 3

, hsplit = '#'

, bylen = 55

);

%endprog;

Assessment N0 5. Please produce the following table from SASHELP.CARS using an appropriate MoSTO macro:

data cars;

set sashelp.cars;

diff=msrp-invoice;

RUN;

proc format;

value \_catn

1= 'Less than $300'

2= '$300 up to $1000'

3= '$1000 up to $2000'

4= '$2000 up to $3000'

5= '$3000 and above'

;

RUN;

title1 "Difference between MSRP and Invoice price by Region";

%overview\_tab(

data = cars,

class = origin,

subject = model,

total = no,

groups = 'diff < 300' \*'Less than 300'

'diff ge 300 and diff < 1000' \*'$300 up to $1000'

'diff ge 1000 and diff < 2000' \*'$1000 up to $2000'

'diff ge 2000 and diff < 3000' \*'$2000 up to $3000'

'diff ge 3000' \*'$3000 and above')

%endprog;

Assessment No 6. Please produce the following table from **SASHELP.CARS** using an appropriate MoSTO macro:

data cars;

set sashelp.cars;

keep origin type make model drivetrain MSRP Invoice Cylinders Horsepower;

RUN;

PROC MEANS DATA=cars MAXDEC = 0 noprint ;

CLASS origin type make model Invoice Cylinders Horsepower;

VAR msrp;

OUTPUT OUT=cars1 MEAN=MSRP ;

run;

data cars2 ;

set cars1;

if \_type\_=127 then output;

RUN;

proc sort data=cars2;

by origin type msrp;

RUN;

data cars3 ;

set cars2;

by origin type msrp;

if last.type then output;

drop \_freq\_ \_type\_ ;

RUN;

data cars4;

set cars2;

keep origin;

run;

proc sort data=cars4 nodupkey;

by origin;

RUN;

title1 "The most expensive cars manufactured in $origin$ by type"

%datalist(

data = cars3

, page = origin

, var = type make model msrp invoice Cylinders Horsepower

, order = origin

, tablesby = cars4

, optimal = YES

, maxlen = 100

, repby = no

, bylen = 20

);

%endprog();

Assessment No 7. Please produce the following RTF table from SASHELP.CARS using an appropriate MoSTO macro:

data cars;

set sashelp.cars;

label drivetrain="DRIVE#TRAIN"

cylinders="CYLIN#DERS"

horsepower="HORSE#POWER";

RUN;

proc sort data=cars;

by origin;

RUN;

title 'Listing of all Cars';

ods rtf file="/var/swan/root/bhc/general/playground/training/12345/stat/query04/dev/results/exercise7.rtf";

%datalist(

data = sashelp.cars

, page = origin

, by = make model

, var = drivetrain MSRP Invoice EngineSize Cylinders Horsepower mpg\_city mpg\_highway weight wheelbase length

, optimal = YES

, maxlen = 8

, hsplit = '#'

, hsplit\_new = yes

, bylen = 20

);

%endprog();