# SAS ASSIGNMENT 09

# (Manipulating Data)

/\* Question 1 \*/

libname sta5066 '/courses/d649d56dba27fe300/STA5066';

data work.increase;

set sta5066.staff(keep=Employee\_ID Salary);

Increase = Salary \* 0.10;

NewSalary = sum(Salary, Increase);

format Salary Increase NewSalary comma10.;

keep Employee\_ID Salary Increase NewSalary;

run;

proc print data=work.increase noobs;

run;

proc means data=work.increase;

run;

/\* Question 2 \*/

libname sta5066 '/courses/d649d56dba27fe300/STA5066';

data work.birthday;

set sta5066.customer(keep=Customer\_Name Birth\_Date); /\* Keep only necessary variables \*/

Bday2017 = MDY(month(Birth\_Date), day(Birth\_Date), 2017); /\* Create Birthday in 2017 \*/

BdayDOW2017 = weekday(Bday2017); /\* Get the day of the week for Birthday 2017 \*/

Age2017 = intck('year', Birth\_Date, Bday2017); /\* Calculate the age in 2017 \*/

format Bday2017 date9.; /\* Format Birthday to display as date \*/

keep Customer\_Name Birth\_Date Bday2017 BdayDOW2017 Age2017; /\* Keep only the specified variables \*/

run;

proc print data=work.birthday(obs=23) noobs;

run;

proc means data=work.birthday;

run;

/\* Question 3 \*/

libname sta5066 '/courses/d649d56dba27fe300/STA5066';

data work.region;

set sta5066.supplier(keep=Supplier\_Name Country); /\* Keep only necessary variables \*/

if Country in ('CA', 'US') then do;

Discount = 0.10;

DiscountType = 'Required';

Region = 'North America';

end;

else do;

Discount = 0.05;

DiscountType = 'Optional';

Region = 'Not North America';

end;

keep Supplier\_Name Country Discount DiscountType Region; /\* Keep only the specified variables \*/

run;

proc print data=work.region noobs;

run;

proc means data=work.region;

run;

/\* Question 4 \*/

libname sta5066 '/courses/d649d56dba27fe300/STA5066';

data work.ordertype;

set sta5066.orders(keep=Order\_Date Order\_Type);

DayOfWeek = weekday(Order\_Date);

select (Order\_Type);

when (1) do;

Type = 'Catalog Sale';

SaleAds = 'Mail';

end;

when (2) do;

Type = 'Internet Sale';

SaleAds = 'Email';

end;

when (3) Type = 'Retail Sale';

end;

drop Order\_Type Employee\_ID Customer\_ID;

run;

proc print data=work.ordertype(obs=25) noobs;

run;

proc means data=work.ordertype;

run;

/\* Question 5 \*/

libname sta5066 '/courses/d649d56dba27fe300/STA5066';

data work.gifts;

set sta5066.nonsales(keep=Employee\_ID First Last Gender);

select (Gender);

when ('F') do;

Gift1 = 'Perfume';

Gift2 = 'Cookware';

end;

when ('M') do;

Gift1 = 'Cologne';

Gift2 = 'Lawn Equipment';

end;

otherwise do;

Gift1 = 'Coffee';

Gift2 = 'Lawn Calendar';

end;

end;

keep Employee\_ID First Last Gift1 Gift2;

run;

proc print data=work.gifts(obs=27) noobs;

run;

proc means data=work.gifts;

run;

/\* Question 6 \*/

libname sta5066 '/courses/d649d56dba27fe300/STA5066';

data work.increase;

set sta5066.staff(keep=Employee\_ID Emp\_Hire\_Date Salary);

where Emp\_Hire\_Date >= '01Jul2006'd;

Increase = Salary \* 0.10;

NewSalary = sum(Salary, Increase);

if Increase > 3000;

format Salary Increase NewSalary comma10.;

keep Employee\_ID Emp\_Hire\_Date Salary Increase NewSalary;

run;

proc print data=work.increase noobs;

run;

proc means data=work.increase;

run;

/\* Question 7 \*/

libname sta5066 '/courses/d649d56dba27fe300/STA5066';

data work.bigdonations;

set sta5066.employee\_donations(keep=Employee\_ID Qtr1 Qtr2 Qtr3 Qtr4);

Total = sum(of Qtr1-Qtr4);

NoDonation = NMISS(of Qtr1-Qtr4);

if Total >= 50 and NoDonation = 0;

keep Employee\_ID Qtr1 Qtr2 Qtr3 Qtr4 Total NoDonation;

run;

proc print data=work.bigdonations noobs;

run;

proc means data=work.bigdonations;

run;

/\* Question 8 \*/

libname sta5066 '/courses/d649d56dba27fe300/STA5066';

data work.diabetes;

set sta5066.adult(keep=SEQN DMARETHN HSSEX HSAGEIR HAD1 HAD3 HAD4);

if HAD1 not in (1, 2) then delete;

diabetic = (HAD1 = 1);

if HSSEX = 2 and diabetic = 1 and HAD4 = 2 then diabetic = 0;

drop HAD1 HAD3 HAD4;

run;

proc freq data=work.diabetes;

tables diabetic;

run;