# SAS ASSIGNMENT 11

# (Processing Data Iteratively)

/\* Question 1 \*/

data work.future\_costs;

wages = 12874000;

retire = 1765000;

medicine = 649000;

do year = 1 to 10;

wages = wages \* 1.03;

retire = retire \* 1.014;

medicine = medicine \* 1.095;

total\_cost = wages + retire + medicine;

output;

end;

run;

proc print data=work.future\_costs;

run;

data work.future\_costs\_with\_income;

wages = 12874000;

retire = 1765000;

medicine = 649000;

income = 50000000;

do year = 1 to 30;

wages = wages \* 1.03;

retire = retire \* 1.014;

medicine = medicine \* 1.095;

total\_cost = wages + retire + medicine;

income = income \* 1.01;

if total\_cost > income then leave;

output;

end;

run;

proc print data=work.future\_costs\_with\_income;

run;

/\* Question 2 \*/

data work.expenses;

income = 50000000;

expenses = 38750000;

do year = 1 to 30 until (expenses > income);

income = income \* 1.01;

expenses = expenses \* 1.02;

output;

end;

run;

proc print data=work.expenses;

format income expenses dollar12.2;

run;

/\* Question 3 \*/

data work.income;

income = 50000000;

expenses = 38750000;

do year = 1 to 75;

income = income \* 1.01;

expenses = expenses \* 1.02;

if expenses > income then leave;

output;

end;

run;

proc print data=work.income;

format income expenses dollar12.2;

run;

/\* Question 4 \*/

proc contents data="/courses/d649d56dba27fe300/STA5066/orders\_midyear";

run;

data discount\_sales;

set "/courses/d649d56dba27fe300/STA5066/orders\_midyear";

array Mon[6] Month1-Month6;

do index = 1 to 6;

Mon[index] = Mon[index] \* 0.95;

end;

drop index;

run;

proc print data=discount\_sales;

format Month1-Month6 dollar12.2;

run;

/\* Question 5 \*/

data special\_offer;

set "/courses/d649d56dba27fe300/STA5066/orders\_midyear";

array Mon[3] Month1-Month3;

Total\_Sales = sum(of Month1-Month6);

do index = 1 to 3;

Mon[index] = Mon[index] \* 0.90;

end;

Projected\_Sales = sum(of Month1-Month6);

Difference = Total\_Sales - Projected\_Sales;

keep Total\_Sales Projected\_Sales Difference;

run;

proc print data=special\_offer;

format Total\_Sales Projected\_Sales Difference dollar12.2;

sum Difference;

run;

/\* Question 6 \*/

libname order '/courses/d649d56dba27fe300/STA5066';

data work.preferred\_cust;

set order.orders\_midyear;

array Mon[6] Month1-Month6;

array Target[6] \_temporary\_ (200 400 300 100 100 200);

array Over[6] Over1-Over6;

Total\_Over = 0;

do i = 1 to 6;

if Mon[i] > Target[i] then Over[i] = Mon[i] - Target[i];

else Over[i] = 0;

Total\_Over + Over[i];

end;

if Total\_Over > 500;

keep Customer\_ID Over1-Over6 Total\_Over;

run;

proc print data=work.preferred\_cust;

format Over1-Over6 Total\_Over dollar12.2;

run;

/\* Question 7 \*/

libname test '/courses/d649d56dba27fe300/STA5066';

proc contents data=test.test\_answers;

run;

data work.passed work.failed;

set test.test\_answers;

array correct[10] $1 \_temporary\_ ('A', 'C', 'C', 'B', 'E', 'E', 'D', 'B', 'B', 'A');

array answers[10] $1 Ans1-Ans10;

Score = 0;

do i = 1 to 10;

if answers[i] = correct[i] then Score + 1;

end;

if Score >= 7 then output work.passed;

else output work.failed;

run;

proc print data=work.passed;

title 'Passed Employees';

run;

proc print data=work.failed;

title 'Failed Employees';

run;

proc sql;

select count(\*) as Count\_Passed from work.passed;

select count(\*) as Count\_Failed from work.failed;

quit;

/\* Question 8 \*/

libname mylib '/courses/d649d56dba27fe300/STA5066';

proc contents data=mylib.labsubset;

run;

proc means data=mylib.labsubset n nmiss min max;

var hgp htp tcp tgp lcp hdp fbpsi crp sgp urp;

run;

data work.examsub2;

set mylib.labsubset;

array vars hgp htp tcp tgp lcp hdp fbpsi crp sgp urp;

array unknown[5] \_temporary\_ (8, 88, 888, 8888, 88888);

do i = 1 to dim(vars);

do j = 1 to dim(unknown);

if vars[i] = unknown[j] then vars[i] = .;

end;

end;

drop i j;

run;

proc means data=work.examsub2 n nmiss min max;

var hgp htp tcp tgp lcp hdp fbpsi crp sgp urp;

run;