# SAS ASSIGNMENT 12

# (Manipulating Data part 2)

Libname SasData "/courses/d649d56dba27fe300/STA5066";

/\* Question 1 \*/

proc print data=SasData.au\_salesforce;

run;

data work.codes;

set SasData.au\_salesforce;

FCode1 = lowcase(substr(First\_Name, 1, 1));

FCode2 = lowcase(substr(First\_Name, length(First\_Name), 1));

LCode = lowcase(substr(Last\_Name, 1, 4));

User\_ID = cats(FCode1, FCode2, LCode);

run;

proc print data=work.codes;

var First\_Name FCode1 FCode2 Last\_Name LCode User\_ID;

run;

/\* Question 2 \*/

proc print data=SasData.newcompetitors;

run;

data work.smallstores;

set SasData.newcompetitors;

if substr(ID, anydigit(ID, 3), 1) = '1' then do;

city = propcase(city);

output;

end;

run;

proc print data=work.smallstores;

run;

/\* Question 3 \*/

proc contents data=Sasdata.contacts;

run;

proc print data=Sasdata.contacts;

run;

data work.states;

set SasData.contacts;

Location = propcase(zipname(substr(Address2, length(Address2)-4, 5)));

run;

proc print data=work.states;

var ID Name Location;

run;

/\* Question 4 \*/

proc contents data=SasData.customers\_ex5;

run;

proc print data=SasData.customers\_ex5 (obs=15);

run;

data work.names;

set SasData.customers\_ex5;

if Gender = 'M' then New\_Name = catx(' ', 'Mr.', Name);

else if Gender = 'F' then New\_Name = catx(' ', 'Ms.', Name);

run;

proc print data=work.names;

var New\_Name Name Gender;

run;

/\* Question 5 \*/

proc print data=SasData.customers\_ex5;

run;

data work.silver work.gold work.platinum;

set SasData.customers\_ex5;

Customer\_ID = tranwrd(Customer\_ID, '-00-', '-15-');

if index(Customer\_ID, 'Silver') > 0 then output work.silver;

else if index(Customer\_ID, 'Gold') > 0 then output work.gold;

else if index(Customer\_ID, 'Platinum') > 0 then output work.platinum;

keep Customer\_ID Name Country;

run;

proc print data=work.silver;

run;

proc print data=work.gold;

run;

proc print data=work.platinum;

run;

/\* Question 6 \*/

proc print data=SasData.employee\_donations;

run;

data work.split;

set SasData.employee\_donations;

PctLoc = index(Recipients, '%');

if PctLoc > 0 then do;

Charity = substr(Recipients, 1, PctLoc-1);

output;

Charity = substr(Recipients, PctLoc+1);

output;

end;

else do;

Charity = Recipients;

output;

end;

run;

proc print data=work.split;

run;

/\* Question 7 \*/

proc print data=SasData.orders\_midyear;

run;

data work.sale\_stats;

set SasData.orders\_midyear;

MonthAvg = round(mean(of Month1-Month6), 1);

MonthMax = max(of Month1-Month6);

MonthSum = sum(of Month1-Month6);

run;

proc print data=work.sale\_stats;

var Customer\_ID MonthAvg MonthMax MonthSum;

run;

/\* Question 8 \*/

proc print data=Sasdata.orders\_midyear;

run;

data work.freqcustomers;

set Sasdata.orders\_midyear;

if n(of Month1-Month6) >= 5 then do;

MonthMedian = median(of Month1-Month6);

Top2Months = largest(1, of Month1-Month6) + largest(2, of Month1-Month6);

output;

end;

run;

proc print data=work.freqcustomers;

run;

/\* Question 9 \*/

proc contents data=Sasdata.shipped;

run;

proc print data=Sasdata.shipped;

run;

data work.shipping\_notes;

set Sasdata.shipped;

length Comment $ 30;

Comment = catx(' ', 'Shipped on', put(Ship\_Date, date9.));

Price\_num = input(compress(Price, '$'), best.);

Quantity\_num = Quantity;

if not missing(Quantity\_num) and not missing(Price\_num) then

Total = Quantity\_num \* Price\_num;

else

Total = .;

put 'Price=' Price;

put 'Price\_num=' Price\_num;

put 'Quantity=' Quantity;

put 'Total=' Total;

run;

proc print data=work.shipping\_notes noobs;

format Total dollar7.2;

run;

/\* Question 10 \*/

proc contents data=Sasdata.US\_newhire;

run;

proc print data=Sasdata.US\_newhire;

run;

data work.US\_converted;

set Sasdata.US\_newhire;

ID\_num = input(compress(ID, '-'), 15.);

if vtype(Telephone) = 'N' then

Telephone\_char = put(Telephone, z8.);

else

Telephone\_char = compress(Telephone, '-');

if length(Telephone\_char) = 8 then

Telephone\_char = catx('-', substr(Telephone\_char, 2, 3), substr(Telephone\_char, 5));

else

Telephone\_char = '';

if not missing(Birthday) and vtype(Birthday) = 'C' then do;

Birthday\_date = input(Birthday, mmddyy10.);

if missing(Birthday\_date) then Birthday\_date = input(Birthday, anydtdte.);

end;

format Birthday\_date date9.;

keep ID\_num Telephone\_char Birthday\_date;

run;

proc contents data=work.US\_converted;

run;

proc print data=work.US\_converted;

run;