Data Dealership;

Input Date Date9. Day $ Car $ Units Team $ Avg\_Price;

Format Date Date9.;

Datalines;

20Jul2019 Sat Alpha 20 A1 39000

20Jul2019 Sat Alpha 20 A2 39100

20Jul2019 Sat Omega 25 A3 67000

20Jul2019 Sat Omega 22 A4 68000

21Jul2019 Sun Alpha 12 A1 39200

21Jul2019 Sun Alpha 14 A2 39300

21Jul2019 Sun Omega 16 A3 67500

21Jul2019 Sun Omega 11 A4 67300

22Jul2019 Mon Alpha 14 A1 39300

22Jul2019 Mon Alpha 11 A2 39500

22Jul2019 Mon Omega 10 A3 67200

22Jul2019 Mon Omega 9 A4 68400

23Jul2019 Tue Alpha 15 A1 39250

23Jul2019 Tue Alpha 13 A2 39350

23Jul2019 Tue Omega 9 A3 67600

23Jul2019 Tue Omega 10 A4 68100

24Jul2019 Wed Alpha 10 A1 39300

24Jul2019 Wed Alpha 7 A2 39500

24Jul2019 Wed Omega 15 A3 67100

24Jul2019 Wed Omega 12 A4 67650

25Jul2019 Thu Alpha 16 A1 39400

25Jul2019 Thu Alpha 18 A2 39300

25Jul2019 Thu Omega 17 A3 67800

25Jul2019 Thu Omega 13 A4 68300

26Jul2019 Fri Alpha 18 A1 39600

26Jul2019 Fri Alpha 19 A2 39800

26Jul2019 Fri Omega 20 A3 67800

26Jul2019 Fri Omega 22 A4 68200

27Jul2019 Sat Alpha 25 A1 39450

27Jul2019 Sat Alpha 23 A2 39850

27Jul2019 Sat Omega 29 A3 67600

27Jul2019 Sat Omega 20 A4 68100

28Jul2019 Sun Alpha 15 A1 39050

28Jul2019 Sun Alpha 18 A2 39550

28Jul2019 Sun Omega 19 A3 67900

28Jul2019 Sun Omega 16 A4 68300

;

Proc Print Noobs;

Where Date Ge '27Jul2019'd;

Run;

\*xxx;

Proc SQL;

Title 'Sales Report for Management';

Create View Sales\_MI As

Select Date, Day, Car, SUM(Units) as Units\_Sold, SUM(Units\*Avg\_Price) as Revenue

From Dealership

Group by 1,2,3

;

Quit;

\*xx;

Proc SQL;

Describe Table Dealership;

Describe View Sales\_MI;

Quit;

\*xx;

Proc SQL;

Create View Sales\_All\_Cars As

Select Date, Day, Sum(Units\_Sold) As Units

From Sales\_MI

Group by 1,2

;

Title 'Use Another View';

Create View Join As

Select a.\*, b.Units

From Dealership As a Left Join Sales\_All\_Cars as b

On A.Date=B.Date

And A.Day=B.Day

;

Quit;

Proc SQL Feedback;

Select \* From Join;

Quit;

\*xx;

Proc Sql;

Select \* From Sales\_MI;

Quit;

\*xx;

Proc SQL;

Create View Dealership As

Select Date, Day, Car, SUM(Units) as Units\_Sold, SUM(Units\*Avg\_Price) as Revenue

From Dealership

Group by 1,2,3

;

Quit;

\*xx;

Data Dealership\_Looped (Drop=i);

do i = 1 to 1000000;

do j = 1 to n;

set Dealership nobs=n point=j;

output;

end;

end;

stop;

Run;

Proc Sql;

Create Table Multiplier As

Select \*, Avg\_Price\*1.5 as Avg\_new

From Dealership\_Looped

;

Quit;

Proc Means Data = Multiplier;

Var Avg\_New;

Run;

Proc Sql;

Create View Multiplier\_Alt As

Select \*, Avg\_Price\*1.5 as Avg\_new

From Dealership\_Looped

;

Quit;

Proc Means Data = Multiplier\_Alt;

Var Avg\_New;

Run;

\*xx;

Proc Sql;

Delete From dealership\_looped

Where i gt 1;

Quit;

\*xx;

Proc Sql;

Delete From dealership\_looped;

Quit;

Proc Delete Data=dealership\_looped;

Run;

Proc Datasets Library=WORK;

Delete Dealership\_Looped;

Run;

\*xx;

Options Obs=10;

Proc Print Noobs;

Run;

Options Obs=Max;

Proc Sql;

Alter Table Dealership\_Looped

Drop i;

Quit;

Options Obs=10;

Proc Print Noobs;

Run;

Options Obs=Max;

\*xx;

Proc Sql;

Alter Table Dealership

Modify Car char(12), Avg\_Price format=Dollar11.2 label="Avg Price USD";

Quit;

Options Obs=10;

Proc Print Noobs;

Run;

Options Obs=Max;

\*xx;

Proc Sql;

Alter Table Dealership

Add Rating char(3),

Incentive num format=Dollar11.2;

Quit;

Options Obs=10;

Proc Print Noobs;

Run;

Options Obs=Max;

\*xx;

Proc Sql;

Create table Distinct\_Dealership\_Looped As

Select Distinct \*

From Dealership\_Looped

;

Quit;

Proc Sort Data = Dealership\_Looped Nodupkey;

By \_All\_;

Run;

Proc Sort Data = Dealership\_Looped Out=Proc\_Sort\_Nodups Nodupkey;

By \_All\_;

Run;

\*xx;

Data Class;

Input ClassID $ Year Age Height Weight;

Datalines;

A1234 2013 8 85 34

A2323 2013 9 81 36

B3423 2013 8 80 31

B5324 2013 9 70 35

C2342 2013 9 80 31

D3242 2013 9 85 30

A1234 2019 14 105 64

A2323 2019 15 101 66

B3423 2019 14 100 61

B5324 2019 15 90 55

C2342 2019 15 112 70

D3242 2019 14 112 70

;

Proc Print;

Run;

Proc Sql;

Create Table Class\_NoDuP\_Height As

Select Distinct(Height), ClassID, Year, Age, Weight

From Class

Group by Height

Having Age = Max(Age);

Quit;

Proc Print;

Run;

\*xx;

proc summary data=Class

nway ;

class Height ;

id ClassID Year Age Weight;

output out=Class\_without\_DupKey

(drop=\_type\_) ;

run ;

proc print data=Class\_without\_DupKey noobs ;

run ;

\*xxx;

Proc Summary Data = Dealership\_Looped Nway;

Class \_All\_;

Output Out = Proc\_Summary\_Nway;

Run;

\*xx;

%Let n = 36000000;

%PUT n is &n;

Proc SQL;

Select Count(\*) Into: n\_sql

From Dealership\_Looped;

Quit;

%Put n\_sql is &n\_sql;

\*xx;

Proc SQL;

Select Distinct Team Into: Teams

From Dealership;

Quit;

%Put Teams is &Teams;

Proc SQL NoPrint;

Select Distinct Team Into: Team1-:Team4

From Dealership;

Quit;

%Put Team1 is &Team1;

%Put Team2 is &Team2;

%Put Team3 is &Team3;

%Put Team4 is &Team4;

\*xx;

Proc SQL NoPrint;

Select Distinct Team Into: Teams Separated by ","

From Dealership;

Quit;

%Put Teams is &Teams;

\*xx;

%Macro Loop\_Dealership\_Table;

Proc SQL NoPrint;

Select count(\*) Into: Count from Dealership;

Quit;

Data Dealership\_Looped (Drop=i);

do i = 1 to 1000000;

do j = 1 to &Count;

set Dealership nobs=n point=j;

output;

end;

end;

stop;

Run;

%Mend;

%Loop\_Dealership\_Table;

\*xx;

Proc SQL;

Create Index Team

On Dealership(Team);

Create Index Composite

On Dealership(Car, Team);

Quit;

\*xx;

Proc SQL;

Describe Table Dealership;

Quit;

\*xx;

Options Msglevel=i;

Proc Sql NoPrint;

Select \*

From Dealership

Where Team = 'A4';

Quit;

\*xx;

Proc SQL NoPrint;

Select \*

From Dealership (idxwhere = no)

Where Team = 'A4';

Quit;

\*xx;

Proc SQL NoPrint;

Drop Index Team, Composite

From Dealership;

Quit;