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

;

Data Alt;

Set Class;

Dataset="Alt";

Run;

Options NOMREPLACE SYMBOLGEN MPRINT;

%Macro Value;

%Let Target = Class;

Data Test;

Set &Target;

Run;

%Mend Value;

%Value;

%Macro Replace\_Value;

%Let Target = Alt;

Data Test;

Set &Target;

Run;

%Mend Replace\_Value;

%Replace\_Value;

\*Re-run Replace\_Value;

%Replace\_Value;

\*Compile and run Replace\_Value;

%Macro Replace\_Value;

%Let Target = Alt;

Data Test;

Set &Target;

Run;

%Mend Replace\_Value;

%Replace\_Value;

\*xxx;

%Macro Compile\_Test;

%Put 'Macro Will Compile';

%Mend Compile\_Test;

%Compile\_Test;

OPTIONS NOMCOMPILE;

%Macro Compile\_Test\_Alt;

%Put "Macro Won't Compile";

%Mend Compile\_Test\_Alt;

%Compile\_Test\_Alt;

OPTIONS MCOMPILE;

\*xxx;

OPTIONS MEXECNOTE NOSYMBOLGEN NOMPRINT;

%Macro Test\_Log;

Data Test;

Set Class;

Run;

%Mend Test\_Log;

%Test\_Log;

%Macro Test\_Log\_Alt;

Data Test;

Set Class\_Alt;

Run;

%Mend Test\_Log\_Alt;

%Test\_Log\_Alt;

\*xxx;

OPTIONS MCOMPILENOTE=All;

%Macro Compile\_Test;

%PUT 'Macro will compile';

%Mend Compile\_Test;

%Compile\_Test;

OPTIONS mautosource;

OPTIONS MCOMPILENOTE=NoAutoCall;

%Macro Compile\_Test;

%PUT 'Macro will compile';

%Mend Compile\_Test;

%Compile\_Test;

OPTIONS MCOMPILENOTE=None;

%Macro Compile\_Test;

%PUT 'Macro will compile';

%Mend Compile\_Test;

%Compile\_Test;

OPTIONS MCOMPILENOTE=All;

%Macro Compile\_Test;

%End;

%Mend Compile\_Test;

%Compile\_Test;

OPTIONS MCOMPILENOTE=NoAutoCall;

%Macro Compile\_Test;

%End;

%Mend Compile\_Test;

%Compile\_Test;

OPTIONS MCOMPILENOTE=None;

%Macro Compile\_Test;

%End;

%Mend Compile\_Test;

%Compile\_Test;

\*xxx;

OPTIONS MAUTOCOMPLOC;

%PUT %LEFT( This is a);

\*xxx;

OPTIONS NOMACRO;

%Macro Test;

%Mend;

%Test;

\*xxx;

Data Execute;

Set Class;

If Year = 2013 Then

Call Execute ('Proc Print Data = Execute; Var Age Height; Run;');

Else Call Execute ('Proc Print Data = Execute; Run;');

Run;

\*xxx;

Proc Sort Data = Class Out = Sorted;

By Descending Year Age Descending Height;

Run;

Data First;

Set Sorted;

By Descending Year Age Descending Height;

If First.Year and First.Height then output First;

Call Execute ('Proc Print Data = \_LAST\_; Where Year = 2019; Run;');

Call Execute ('Proc Print Data = \_LAST\_; Where Year = 2013; Run;');

Run;

\*xxx;

%Let Out = Class\_;

Data &Out2013 &Out2019;

Set Class;

If Year EQ 2013 Then Output &Out2013;

Else Output &Out2019;

Run;

%Let Out = Class\_;

Data &Out.2013 &Out.2019;

Set Class;

If Year EQ 2013 Then Output &Out.2013;

Else Output &Out.2019;

Run;

Proc Print Data = &Out.2013;

Run;

Proc Print Data = &Out.2019;

Run;

\*xxx;

OPTIONS SYMBOLGEN MPRINT;

%Let Libref = WORK;

Data &Libref.Class\_Alt;

Set Class;

Run;

%Let Libref = WORK;

Data Class\_Alt;

Set &Libref.Class;

Run;

%Let Libref = WORK;

Data Class\_Alt;

Set &Libref..Class;

Run;

\*xxx;

%Let ClassID2013 = X12342013; \*We will try and get this value in the LOG;

%Let Year = 2013;

%Macro Test;

%Put &ClassID&Year;

%Mend;

%Test;

%Let ClassID2013 = X12342013;

%Let Year = 2013;

%Macro Test;

%Put &&ClassID&Year;

%Mend;

%Test;

\*xxx;

%Let ClassID1 = A12341;

%Let ClassID2 = A23232;

%Let ClassID3 = B34233;

%Let ClassID4 = B53244;

%Let ClassID5 = C23425;

%Let ClassID6 = D32426;

%Macro ClassIDYear;

%Do i= 1 %To 5;

&ClassID&i

%End;

%Mend;

%Put %ClassIDYear;

\*xxx;

%Let Class = A;

%Let N = 1;

%Let Class1 = B2;

%Let A1 = A1Unknown;

%PUT &Class&N;

%PUT &&Class&N;

%PUT &&&Class&N;

\*xxx;

OPTIONS SYMBOLGEN MPRINT;

%LET Output = Proc Print; Data = Class; Where Year = 2019; Run;

\*xxx;

%LET Output = %STR(Proc Print; Data = Class; Where Year = 2019; Run;);

%PUT Output is &Output;

\*xxx;

%LET Output = Proc Print%STR(;) Data = Class%STR(;) Where Year = 2019%STR(;) Run%STR(;);

%PUT Output is &Output;

\*xxx;

OPTIONS SYMBOLGEN MPRINT;

%Let Name = %STR(Philip%'s);

%PUT &Name;

\*xxx;

OPTIONS SYMBOLGEN MPRINT MLOGIC;

%Macro Mnemonic (Company);

%If &Company = GE %Then %Put &Company eq General Electric;

%Else %PUT &Company is ABC;

%Mend Mnemonic;

%Mnemonic (GE);

\*xxx;

OPTIONS SYMBOLGEN MPRINT MLOGIC;

%Macro Mnemonic (Company);

%If &Company = GE %Then %Put &Company eq General Electric;

%Else %PUT &Company is ABC;

%Mend Mnemonic;

%Mnemonic (LT);

%Macro Mnemonic (Company);

%If &Company = %STR(GE) %Then %Put Comapny eq General Electric;

%Else %PUT &Company is ABC;

%Mend Mnemonic;

%Mnemonic (LT);

\*xxx;

%Macro IceCream;

%PUT My favorite ice cream is Ben&Jerry;

%Mend IceCream;

%IceCream;

\*xxx;

%Macro IceCream;

%PUT My favorite ice cream is %NRSTR(Ben&Jerry);

%Mend IceCream;

%IceCream;

\*xxx;

OPTIONS NOSYMBOLGEN NOMPRINT NOMLOGIC;

%Let Icecream = Awesome;

%Let A = %STR(&Icecream);

%Let B = %NRSTR(&Icecream);

%Let C = %BQUOTE(&Icecream);

%Let D = %NRBQUOTE(&Icecream);

%PUT A is &A;

%PUT B is &B;

%PUT C is &C;

%PUT D is &D;