Run a Macro *n* times with different parameters.

There is a little known SAS statement CALL EXECUTE that can be used within a datastep to execute another piece of code immediately after the datastep has completed for each time the CALL EXECUTE was called.

This allows you to code the parameters you require in Datastep where you have easy access to all the SAS functions you need to calculate the parameters for the macro you want to run.

The example below simply calculates the 12 months the macro is to be called for and immediately calls the macro.

The Datastep could create a dataset for further processing but in this example is just writing to _null_;

CODE:

```
%macro EXAMPLE_MACRO(PARAM1);
  %put EXAMPLE_MACRO has run with the
Parameters &PARAM1;
%mend;

/* Now Call this macro with Various Values
*/
data _null_;
  START_MONTH = '01jan2006'd;
  MONTHS = 12;
  do MONTH = 0 to MONTHS-1;
    CMD = '%EXAMPLE_MACRO(' !!
put(intnx("MONTH",START_MONTH,MONTH),date9.
) !! ')';
    call execute (CMD);
  end;
run;
```

RESULTS:

```
EXAMPLE_MACRO has run with the Parameters
01JAN2006
EXAMPLE_MACRO has run with the Parameters
01FEB2006
EXAMPLE_MACRO has run with the Parameters
01MAR2006
EXAMPLE_MACRO has run with the Parameters
01APR2006
EXAMPLE_MACRO has run with the Parameters
01MAY2006
EXAMPLE_MACRO has run with the Parameters
01JUN2006
EXAMPLE_MACRO has run with the Parameters
01JUL2006
EXAMPLE_MACRO has run with the Parameters
01AUG2006
EXAMPLE_MACRO has run with the Parameters
01SEP2006
EXAMPLE_MACRO has run with the Parameters
01OCT2006
EXAMPLE_MACRO has run with the Parameters
01NOV2006
EXAMPLE_MACRO has run with the Parameters
01DEC2006
```

This method can also be used to validate whether or not the macro needs to be called at all and if not would not execute the CALL EXECUTE at all.