/\*%%%%%% CONTROL TERMINOLOGY %%%%%%%%%\*\*/  
  
  
proc format;  
  
 invalue levnum  
   
 "BASIC"=1  
 "INTERMIDATE"=2  
 "ADVANCE"=3  
 ;  
   
 value $basic  
   
 "feeMale","F"="F"  
 "MaLe","male"="M"  
 "N"="N"  
 "Na","NA"="NA"  
 "NO","No","nO"="N"  
 "YES","Yes","y"="Y"  
 other="CT Is Not Applied For The Value, Please Find Or Use Extensible Value"  
 ;   
   
 value $interm  
   
 "Alcohol"="Ethanol"  
 "Inconculsive"="INDETERMINATE"  
 "Neg"="NEGATIVE"  
 "Preg test"="Choriogonadotropin Beta"/\*\* LBTESTCD = HCG \*\*/  
 "leuKocytes"="Leukocytes" /\*\*LBTESTCD = WBC \*\*/  
 "positive"="POSITIVE"  
 other="CT Is Not Applied For The Value, Please Find Or Use Extensible Value"  
 ;   
   
 value $advance  
   
 "ABNORMAL","AbNORMAL,CLI. SIGNIFIC .","Abnormal",   
 "Abnormal, Changed from baseline","Abnormal, Clinically significant"="ABNORMAL"  
 "NORMAL"="NORMAL"  
 "10\*12/Lit"="10^12/L"  
 "Breaths per Minute"="breaths/min"   
 "Percent"="%"  
 "Thou/L"="10^3/L"  
 "hpf"="/HPF"  
 other="CT Is Not Applied For The Value, Please Find Or Use Extensible Value"  
 ;  
  
run;  
   
  
/\*\* IMPORT RAW FILE \*\*/   
  
filename raw\_ct '/home/shahparth260/RAW\_CONT.xls';  
  
proc import datafile=raw\_ct dbms=xls replace out=raw\_ct\_db;  
run;  
   
/\*\* WITHIN LEVELS HOW MANY CT\_CODES AND RAW\_VALUE WE NEED TO FIND \*\*\*/   
  
proc sort data=raw\_ct\_db;  
 by sr\_num;  
run;  
  
/\*\* LET'S WARM UP \*\*/   
  
proc sort data=raw\_ct\_db out=basic;   
 by sr\_num;  
 where level eq upcase('BASIC'); /\* I'VE INCLUDED FOR LEARNING PURPOSE \*\*\*\*/  
run;  
  
proc freq data=basic noprint;  
 table level \* ct\_code \* sdtm\_variable \* raw\_value /out=basic (drop=percent count);  
 /\*\* LEVEL \* ALL UNIQUE CONTROL TERM CODE \* SDTM VAR \* RAW VAL \*\*\*/  
run;  
  
/\*\* APPLY CONTROL TERMINOLOGY \*\*\*\*/   
  
data basic;  
 retain ct\_code raw\_value sdtm\_value;  
 length sdtm\_value $100.;  
 set basic;   
   
 sdtm\_value=put(strip(raw\_value),$basic.);  
 levnum=input(level,levnum.);  
run;  
  
/\*\* NOW LET'S STRECH YOUR SELF \*\*\*/   
  
proc sort data=raw\_ct\_db out=interm;   
 by sr\_num;  
 where level eq upcase('INTERMIDATE');  
run;  
  
proc freq data=interm noprint;  
 table level \* ct\_code \* sdtm\_variable \* raw\_value /out=interm (drop=percent count);  
run;  
  
/\*\* APPLY CONTROL TERMINOLOGY \*\*\*\*/   
  
data interm;  
 retain ct\_code raw\_value sdtm\_value;  
 length sdtm\_value $100.;  
 set interm;   
   
 sdtm\_value=put(strip(raw\_value),$interm.);  
 levnum=input(level,levnum.);  
run;  
  
/\*\* NOW TEST YOUR SELF \*\*/   
  
proc sort data=raw\_ct\_db out=advance;   
 by sr\_num;  
 where level eq upcase('ADVANCE');  
run;  
  
proc freq data=advance noprint;  
 table level \* ct\_code \* sdtm\_variable \* raw\_value /out=advance (drop=percent count);  
run;  
  
/\*\* APPLY CONTROL TERMINOLOGY \*\*\*\*/   
  
data advance;  
 retain ct\_code raw\_value sdtm\_value;  
 length sdtm\_value $100.;  
 set advance;   
 sdtm\_value=put(strip(raw\_value),$advance.);  
 levnum=input(level,levnum.);  
 run;  
  
/\*\* SORT IT \*\*/   
  
%macro sort (&out\_dsn=);  
  
proc sort data=&out\_dsn;  
 by levnum ct\_code sdtm\_value raw\_value;  
run;  
  
%mend sort;  
  
%macro sort (&out\_dsn=basic);  
%macro sort (&out\_dsn=interm);  
%macro sort (&out\_dsn=advance);  
  
/\*\* SET TO GETHER \*\*\*/   
  
data final ;  
 retain levenum level ct\_code sdtm\_value raw\_value;  
 set basic interm advance;  
 by levnum ct\_code sdtm\_value raw\_value;  
run;  
  
/\*\* PRINT IT \*\*\*/  
  
proc print data=final noobs;  
 var level ct\_code sdtm\_variable sdtm\_value raw\_value ;  
run;