

Macros

How can I search for a phrase in all SAS files in a directory and subdirectories?

```
/* *****
***** */
/**
    *** /
/** Search for any given text string in all *.sas files in a direct
ory    *** /
/** and all sub-
directories.                                     *** /
/**
    *** /
/* *****
***** */
/**
    *** /
/** Sample call: %findit(lookin = c:\mycode\reports
    *** /
/**                                     ,lookfor = data _null_)
    *** /
/**
    *** /
/**                                     %findit(lookfor = %nrstr(%printit))
    *** /
/**
    *** /
/* *****
***** */
```

```
%macro findit( lookin = c:\code
               ,lookfor = ????)
) ;
%local count lookin lookfor i j ;
options nonotes nomlogic nomprint nomprintnest nosymbolgen ;

*** Assign a fileref to the directory and open it *** ;

%let rc = %sysfunc(filename(filrf,&lookin)) ;

%let did = %sysfunc(dopen(&filrf)) ;

** Ensure Directory is available *** ;

%if &did eq 0 %then
```

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```
%do ;
    %put ERROR: Directory &lookin cannot be opened or does not exist.
;
    %goto endmac ;

%end;

*** Close the directory and clear the fileref *** ;

%let rc = %sysfunc(dclose(&did)) ;

%let rc = %sysfunc(filename(filrf)) ;

%let lookin = %lowercase(&lookin) ;
%let lookfor = %lowercase(&lookfor) ;

*** Get Directories and subdirectories from location *** ;

filename dirlist pipe "dir &lookin /b /s /a:d" ;

data dirs (drop = count);
    length dir $ 100 ;
    if _n_ = 1 then
        do ;
            count + 1 ;
            dir = "&lookin" ;
            call symputx('dcount',put(count,6.)) ;
output ;
        end ;
    infile dirlist end = last ;
    *** Handle empty Directory List *** ;
    if _n_ = 1 and last then goto endstep ;
    input dir :$100. ;
    count + 1 ;
    if last then call symputx('dcount',put(count,6.)) ;
    output ;
endstep:
run ;

data _null_ ;
    set dirs ;
    call symputx('dir'!!strip(put(_n_,3.)),dir) ;
run ;

%do i = 1 %to &dcount ;

    *** Get *.sas files in directory *** ;
    filename saslist pipe "dir &&dir&i /b" ;
```

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```
data sasfiles_&i (drop = count) ;
  infile saslist end = last ;
  *** Handle empty directories *** ;
  if _n_ = 1 and last then
    do ;
      call symputx('fcount',put(count,6.)) ;
      stop ;
    end ;
  input sasprog :$100. ;
  count + 1 ;
  if not find(lowercase(sasprog), '.sas') then
    do ;
      count + (-1) ;
      if last then call symputx('fcount',put(count,6.)) ;
      delete ;
    end ;
  if last then call symputx('fcount',put(count,6.)) ;
run ;

%if &fcount > 0 %then
%do ;
  proc sql noprint ;
    select sasprog into :sas_&i._1 %if &fcount >1 %then - :sas_&i.
_&fcount ;
    from sasfiles_&i
    ;
  quit ;

%do j = 1 %to &fcount ;
  data found_&i._&j ;
    infile "&&dir&i\&&sas_&i._&j" scanover missover lrecl = 256
pad ;
    _infile_ = lowercase(_infile_) ;
    input @"&lookfor" found $ ;
    if length(found) then
      do ;
        put ;
        put "LOOKFOR: Program file: &&dir&i.\&&sas_&i._&j.." ;
        put _infile_ ;
      end ;
    run ;
%end ;

proc datasets lib = work nolist ;
  delete dirs sasfiles_: found_: ;
quit ;
%end ;
%end ;
```

Macros

```
%endmac :  
options notes ;  
%mend findit ;  
  
%findit(lookin  = c:\myfiles\reports  
        ,lookfor = data _null_)  
  
%findit(lookfor = %nrstr(%printit))
```

Unique solution ID: #1002

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