1. This is the problem I met in my work with my questions described below this MACRO.

Thank you.

**%macro** basic(y=);

proc import out= work.n datafile = "C:\Users\first\Desktop\b0&y..xlsx"

dbms = xlsx replace;

run;

data n0;

set n;

rename A=progcode VAR2=program VAR3=classlevel

VAR4=Studentid VAR6=gender G=graduate;

name = scan(VAR5, **1**, "/ ");

run;

proc sql;

create table n as

select n0.\* , c.college

from n0 left join o.college106 as c

on n0.progcode = c.progcode;

quit;

data n;

set n(drop=VAR5);

email = trim(left(Studentid))||"@ulive.pccu.edu.tw";

year = trim(left(substr(classlevel, **1**,**1**)));

class = trim(left(substr(classlevel, **2**,**1**)));

format classlevel $4. year $3. class $3.;

run;

data basic;

set n;

y = year;

if substr( program , **5** , **1**) in ("M" "P") then y = "5";

if (graduate = **0** and y = "5") then y = "4";

format y $3.;

run;

proc export data=WORK.basic

outfile = "C:\Users\first\Desktop\registered\_name\_list\_&y..xlsx"

dbms = xlsx replace;

run;

**%mend** basic;

Tim’s Q: The above codes is written by me to create name list data set from data extracted on webpage.

1. When I put codes marked in yellow together into one DATASTEP, why dose it not work? When I separate them into two data steps, it works.
2. Why the codes marked in blue does not work? How to modify it?
3. Sorry that the following question comes from my classmate of summer institute:

His university has conducted three year surveys of students’ rating toward faculty instruction quality. An IT technician combines these three data into one excel file and each sheet is one year survey data named as YEAR1, YEAR2, YEAR3, and formats of survey questions and answers of each year are the same. Then that university hires a survey specialist to create a MACRO name *surfreq*, that can summarize survey rating raw data into frequency distributions as table 1. The extracted EXCEL file and created MACRO file are saved in the same file “M:\Public”.

Table 1.

|  |  |  |
| --- | --- | --- |
| varname | answer | Freq. distributions |
| Q1 | A | 10% |
| Q1 | B | 15% |
| Q1 | C | 45% |
| Q1 | D | 30% |
| Q2 | A | 25% |
| Q2 | C | 35% |
| Q2 | E | 40% |
| Q3 | … | … |

1. Please write codes to call SAS to run three year survey data from that combined EXCEL file.
2. Please use ARRAY (Tim’s classmate asks if it is possible) to combined three year output frequency distributions into one output table as table 2. For each question, answers must be matched, and missing must be replaced by 0%.

Table 2.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| varname | Year1 answer | Year1 Freq | Year2 answer | Year2 Freq | Year3 answer | Year3 Freq |
| Q1 | A | 10% | A | 20% | A | 35% |
| Q1 | B | 15% | B | . | B | 30% |
| Q1 | C | 45% | C | 25% | C | . |
| Q1 | D | 30% | D | 55% | D | 35% |
| Q2 |  |  |  |  |  |  |
| Q2 |  |  |  |  |  |  |

3. The following question also comes from Tim’s classmate:

There is an established SQL database stored patients’ records for past ten years. Please use SAS to designs and/or develops specific databases for collection, tracking, and reporting of incoming research data. Maintains computerized collection and tracking of relevant data, appropriate records of research methods, and results. Then connect developed new database to original SQL database with matched patient registration ID.