THOMAS PATTARA

SAS homework 3

9.14.17

I. Recall the self-introduction (SELFINTRO) data from Homework 1. Save this data as a spreadsheet, namely SELFINTRO.xls. Import this data to SAS. Make use of formatting as needed to display all data points correctly. Call the temporary SAS data set SELFINTRO. Use PROC PRINT to list the observations in this data set.

```
data selfintro;
**1) Make an Excel;
PROC EXPORT DATA=perm.perm

OUTFILE="/home/thomaspattara0/sasuser.v94/SELFINTRO/SELFINT
RO.xlsx"
            DBMS=xlsx REPLACE;
     SHEET="Mysheet";
RUN;

** 2) Import file that was just created into a different
dataset;
PROC IMPORT OUT=work.selfintro

DATAFILE="/home/thomaspattara0/sasuser.v94/SELFINTRO/SELFIN
TRO.xlsx"
            DBMS=xlsx REPLACE;
     SHEET="Mysheet";
run;

proc print data=work.selfintro noobs;
title 'Data Imported from SELFINTRO.xls';
run;
```

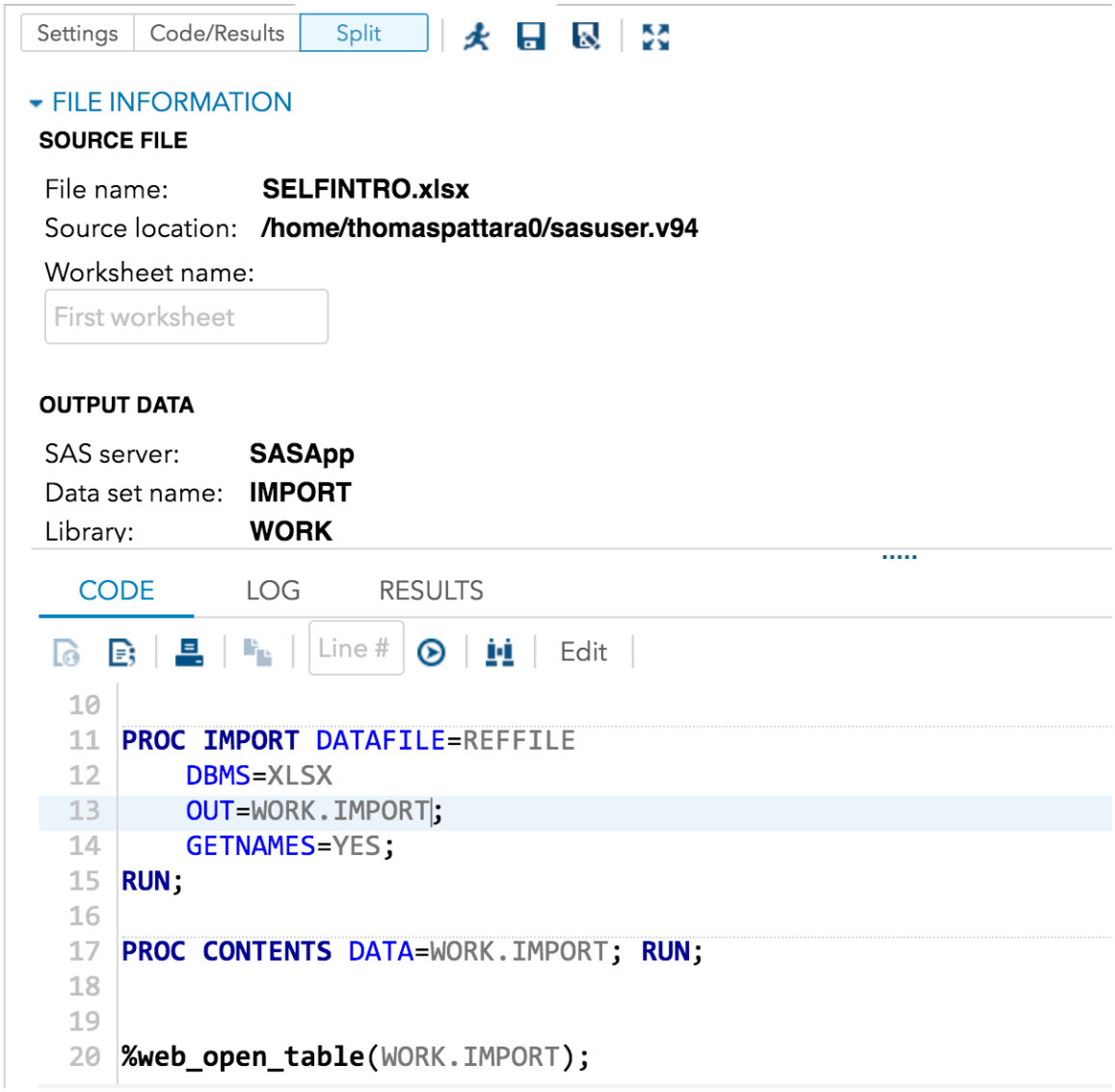
Data Imported from SELFINTRO.xls

FRSTNAME	LASTNAME	MAJOR
Nathan	Remmich	Mathematics
Thomas	Pattara	Mathematics

FRSTNAME	LASTNAME	MAJOR
Walter	Citterman	Mathematics
Ali	Lacey	Mathematics
April	Zhang	Accounting
Jon	Sax	Mathematics
Derek	Johanson	Mathematics
Elizabeth	Rust	Mathematics
Nathan	Thirsten	Mathematics
Taylor	Deutsch	Mathematics
Alex	Wieseler	Mathematics
Jonathan	Hedman	Computer Science
Alexander	Wade	Mathematics
Audrey	Bunge	Mathematics
Riley	Haug	Mathematics
Allison	Bodvig	Mathematics
Allison	Bodvig	Computer Science
Jake	Larson	Mathematics
Hannah	Huss	Mathematics
Jacie	McDonald	Mathematics
Zachary	Shroeder	Mathematics
Josh	Buttke	Mathematics
Paige	Hinton	Mathematics

FRSTNAME	LASTNAME	MAJOR
Shea	Olson	Mathematics
Nicole	Kneip	Mathematics
Tim	Slavik	Mathematics
Drue	Miller	Mathematics
Kory	Heier	Mathematics
Amanda	Peterson	Mathematics
Wesley	Bowen	Mathematics
Courtney	Anderson	Athletic Training
Samuel	Ivanecky	Mathematics
Samuel	Ivanecky	Computer Science

II. Use also the SAS IMPORT wizard to import SELFINTRO.xls into a permanent SAS dataset called SELFINTRO. If you are using SAS Studio, go to Snippets -> Data -> Import XLSX File. Make sure to include the screen shot of the import wizard screen. If SAS is installed on your computer, read the steps in Section 6.2.




```
/* Generated Code (IMPORT) */
/* Source File: SELFINTRO.xlsx */
/* Source Path: /home/thomaspattara0/sasuser.v94 */
/* Code generated on: 9/14/17, 9:38 PM */

%web_drop_table(WORK.IMPORT);


FILENAME REFFILE
'/home/thomaspattara0/sasuser.v94/SELFINTRO.xlsx';

PROC IMPORT DATAFILE=REFFILE
     DBMS=XLSX
     OUT=WORK.IMPORT;
```

```
     GETNAMES=YES;
RUN;

PROC CONTENTS DATA=WORK.IMPORT; RUN;


%web_open_table(WORK.IMPORT);
```

The CONTENTS Procedure

Data Set Name	WORK.IMPORT	**Observations**	33
Member Type	DATA	**Variables**	3
Engine	V9	**Indexes**	0
Created	09/14/2017 15:47:19	**Observation Length**	35
Last Modified	09/14/2017 15:47:19	**Deleted Observations**	0
Protection		**Compressed**	NO
Data Set Type		**Sorted**	NO
Label			
Data Representation	SOLARIS_X86_64, LINUX_X86_64, ALPHA_TRU64, LINUX_IA64		
Encoding	utf-8 Unicode (UTF-8)		

Engine/Host Dependent Information

Data Set Page Size	131072
Number of Data Set Pages	1
First Data Page	1
Max Obs per Page	3730

Engine/Host Dependent Information	
Obs in First Data Page	33
Number of Data Set Repairs	0
Filename	/saswork/SAS_workA3ED00012718_odaws01-prod-us/SAS_work37A100012718_odaws01-prod-us/import.sas7bdat
Release Created	9.0401M4
Host Created	Linux
Inode Number	9568277
Access Permission	rw-r--r--
Owner Name	thomaspattara0
File Size	256KB
File Size (bytes)	262144

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Format	Informat	Label
1	FRSTNAME	Char	9	$9.	$9.	FRSTNAME
2	LASTNAME	Char	9	$9.	$9.	LASTNAME
3	MAJOR	Char	17	$17.	$17.	MAJOR

Obs	FRSTNAME	LASTNAME	MAJOR
1	Nathan	Remmich	Mathematics
2	Thomas	Pattara	Mathematics

Obs	FRSTNAME	LASTNAME	MAJOR
3	Walter	Citterman	Mathematics
4	Ali	Lacey	Mathematics
5	April	Zhang	Accounting
6	Jon	Sax	Mathematics
7	Derek	Johanson	Mathematics
8	Elizabeth	Rust	Mathematics
9	Nathan	Thirsten	Mathematics
10	Taylor	Deutsch	Mathematics
11	Alex	Wieseler	Mathematics
12	Jonathan	Hedman	Computer Science
13	Alexander	Wade	Mathematics
14	Audrey	Bunge	Mathematics
15	Riley	Haug	Mathematics
16	Allison	Bodvig	Mathematics
17	Allison	Bodvig	Computer Science
18	Jake	Larson	Mathematics
19	Hannah	Huss	Mathematics
20	Jacie	McDonald	Mathematics
21	Zachary	Shroeder	Mathematics
22	Josh	Buttke	Mathematics
23	Paige	Hinton	Mathematics

Obs	FRSTNAME	LASTNAME	MAJOR
24	Shea	Olson	Mathematics
25	Nicole	Kneip	Mathematics
26	Tim	Slavik	Mathematics
27	Drue	Miller	Mathematics
28	Kory	Heier	Mathematics
29	Amanda	Peterson	Mathematics
30	Wesley	Bowen	Mathematics
31	Courtney	Anderson	Athletic Training
32	Samuel	Ivanecky	Mathematics
33	Samuel	Ivanecky	Computer Science

III. Run the program here to create a temporary SAS data set called Voter:

```
data voter;
   input Age Party : $1. (Ques1-Ques4)($1. + 1);
datalines;
23 D 1 1 2 2
45 R 5 5 4 1
67 D 2 4 3 3
39 R 4 4 4 4
19 D 2 1 2 1
75 D 3 3 2 3
57 R 4 3 4 4
;
```

Add formats for Age (**0–30, 31–50, 51–70, 71+**), Party (**D = Democrat, R = Republican**), and Ques1–Ques4 (**1=Strongly Disagree, 2=Disagree, 3=No Opinion, 4=Agree, 5=Strongly Agree**). In addition, label Ques1–

Ques4 as follows:

Ques1	**The president is doing a good job**
Ques2	**Congress is doing a good job**
Ques3	**Taxes are too high**
Ques4	**Government should cut spending**

```
proc format;
                value agegrp 0 - 30 = '0 to 30'
                             31 - 50 = '31 to 50'
                             51 - 70 = '50 to 70'
                             71 - high = '71 and older';
                value $party 'D' = 'Democrat'
                              'R' = 'Republican';
                value $likert '1' = 'Strongly Disagree'
                              '2' = 'Disagree'
                              '3' = 'No Opinion'
                              '4' = 'Agree'
                              '5' = 'Strongly Agree';
run;

             data voter;
                input Age Party : $1. (Ques1-Ques4)($1. +
1);
                label Ques1 = 'The president is doing a
good job'
                      Ques2 = 'Congress is doing a good
job'
                      Ques3 = 'Taxes are too high'
                      Ques4 = 'Government should cut
spending';
                format Age agegrp.
                       Party $party.
                       Ques1-Ques4 $likert.;
             datalines;
             23 D 1 1 2 2
             45 R 5 5 4 1
             67 D 2 4 3 3
             39 R 4 4 4 4
             19 D 2 1 2 1
             75 D 3 3 2 3
             57 R 4 3 4 4
             ;
             title "Listing of Voter";
```

```
proc print data=voter;
***Add the option LABEL if you want to use the
   labels as column headings;
run;
title "Frequencies on the Four Questions";
proc freq data=voter;
   tables Ques1-Ques4;
run;
```

Listing of Voter

Obs	Age	Party	Ques1	Ques2	Ques3	Ques4
1	0 to 30	Democrat	Strongly Disagree	Strongly Disagree	Disagree	Disagree
2	31 to 50	Republican	Strongly Agree	Strongly Agree	Agree	Strongly Disagree
3	50 to 70	Democrat	Disagree	Agree	No Opinion	No Opinion
4	31 to 50	Republican	Agree	Agree	Agree	Agree
5	0 to 30	Democrat	Disagree	Strongly Disagree	Disagree	Strongly Disagree
6	71 and older	Democrat	No Opinion	No Opinion	Disagree	No Opinion
7	50 to 70	Republican	Agree	No Opinion	Agree	Agree

Frequencies on the Four Questions

The FREQ Procedure

The president is doing a good job				
Ques1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Strongly Disagree	1	14.29	1	14.29
Disagree	2	28.57	3	42.86

The president is doing a good job				
Ques1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No Opinion	1	14.29	4	57.14
Agree	2	28.57	6	85.71
Strongly Agree	1	14.29	7	100.00

Congress is doing a good job				
Ques2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Strongly Disagree	2	28.57	2	28.57
No Opinion	2	28.57	4	57.14
Agree	2	28.57	6	85.71
Strongly Agree	1	14.29	7	100.00

Taxes are too high				
Ques3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Disagree	3	42.86	3	42.86
No Opinion	1	14.29	4	57.14
Agree	3	42.86	7	100.00

Government should cut spending				
Ques4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Strongly Disagree	2	28.57	2	28.57
Disagree	1	14.29	3	42.86
No Opinion	2	28.57	5	71.43

Government should cut spending				
Ques4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Agree	2	28.57	7	100.00