



UCD School of Mathematics and Statistics

STAT40840: Data programming with SAS

Laura Kirwan

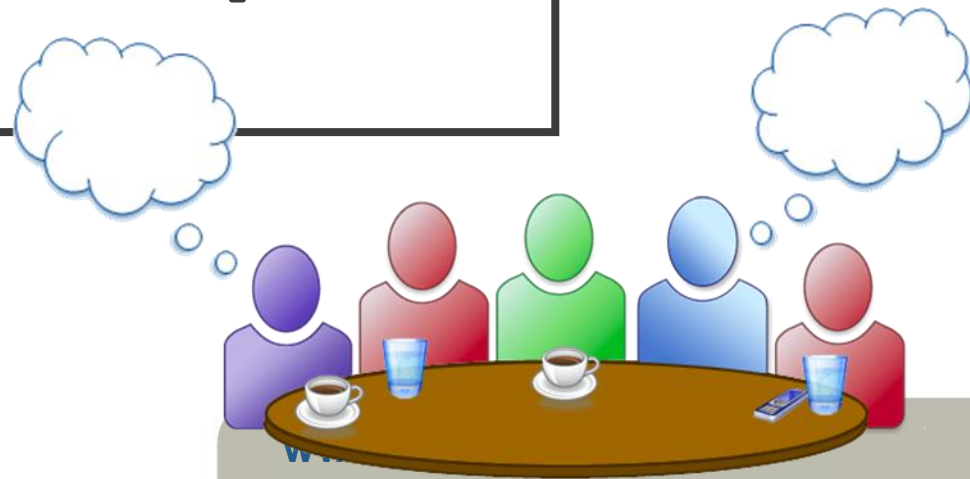
Solutions to Exercises
Week 1

Exercise 1

How does SAS detect the end of each step in this program?

```
data work.newsalesemps;  
  length First Name $ 12  
         Last Name $ 18 Job Title $ 25;  
  infile "&path\newemps.csv" dlm=',';  
  input First Name $ Last Name $  
        Job Title $ Salary;  
run;  
  
proc print data=work.newsalesemps;  
  
proc means data=work.newsalesemps;  
  var Salary;  
quit;
```

L1_E1.sas



Exercise 1 solution

How does SAS detect the end of each step in this program?

```
data work.newsalesemps;  
  length First Name $ 12  
         Last Name $ 18 Job Title $ 25;  
  infile "&path\newemps.csv" dlm=',';  
  input Last Name $  
        salary;
```

run;

run statement

```
proc print data=
```

new procedure – implicit end

```
proc means data=work.newsalesemps;
```

```
  var Sala
```

quit statement

```
quit;
```

L1_E1.sas



Exercise 2

- How many statements make up this DATA step?

L1_E2.sas

```
data work.newsalesemps;  
  length First_Name $ 12  
         Last_Name $ 18 Job_Title $ 25;  
  infile "&path\newemps.csv" dlm=',';  
  input First_Name $ Last_Name $  
        Job_Title $ Salary;  
run;
```

Exercise 2 solution

- How many statements make up this DATA step?

L1_E2.sas

```
data work.newsalesemps;  
  length First Name $ 12  
         Last Name $ 18 Job Title $ 25;  
  infile "&path\newemps.csv" dlm=',';  
  input First Name $ Last Name $  
        Job Title $ Salary;  
run;
```

- This DATA step has five statements.

Exercise 3

- Open and examine **L1_E3.sas**. Based on the comments, which steps do you think are executed and what output is generated?
- Submit the program. Which steps were executed?



Exercise 3 solution

- Open and examine **L1_E3.sas**. Based on the comments, which steps do you think are executed and what output is generated?
- Submit the program. Which steps were executed?
 - The **DATA** step executes and creates an output data set.
 - The **PROC PRINT** step executes and produces a report.
 - The **PROC MEANS** step is “commented out,” and therefore, does not execute.

Exercise 4

This program includes three syntax errors. One is an invalid option. What are the other two syntax errors?

```
daat work.newsalesemps;  
  length First Name $ 12  
         Last Name $ 18 Job Title $ 25;  
infile "&path\newemps.csv" dlm=',';  
input First Name $ Last Name $  
      Job Title $ Salary;  
run;  
  
proc print data=work.newsalesemps  
run;  
  
proc means data=work.newsalesemps average min;  
  var Salary;  
run;
```

L1_E4.sas

invalid option

Exercise 4 solution

This program includes three syntax errors. One is an invalid option. What are the other two syntax errors?

L1_E4.sas

```
daat work newsalesemps;  
length First_Name $ 12  
Last_Name $ 18 Job_Title $ 25;  
infile "&path\newemps.csv" dlm=',';  
input First_Name $ Last_Name $  
Job_Title $ Salary;  
run;  
  
proc print data=work.newsalesemps  
run;  
  
proc means data=work.newsalesemps average min;  
var Salary;  
run;
```

misspelled
keyword

missing
semicolon

invalid option

Exercise 5

What is the syntax error in this program?

L1_E5.sas

```
data work.newsalesemps;
  length First_Name $ 12
           Last_Name $ 18 Job_Title $ 25;
  infile "&path\newemps.csv" dlm=',';
  input First_Name $ Last_Name $
        Job_Title $ Salary;
run;

proc print data=work.newsalesemps
run;

proc means data=work.newsalesemps average min;
  var Salary;
run;
```

Exercise 5 solution

What is the syntax error in this program?

L1_E5.sas

```
data work.newsalesemps;
  length First_Name $ 12
         Last_Name $ 18 Job_Title $ 25;
  infile "&path\newemps.csv" dlm=',';
  input First_Name $ Last_Name $
        Job_Title $ Salary;
run;

proc print data=work.newsalesemps;
run;

proc means data=work.newsalesemps average min;
  var Salary;
run;
```

The program contains unbalanced quotation marks in the DLM= option in the INFILE statement.