

ANLT5010 – Week 3

Assignment 1 Tutorial

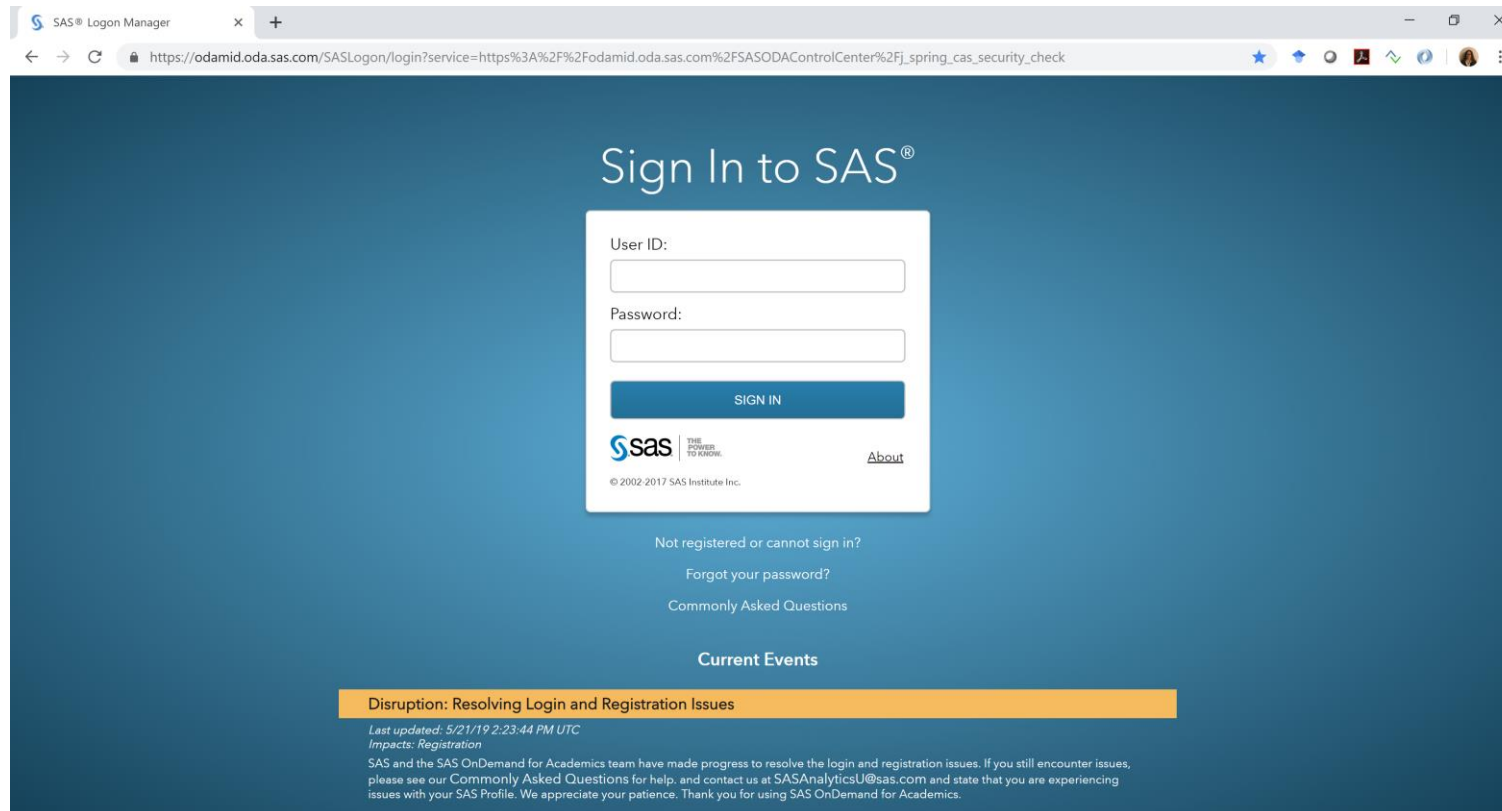
SAS Studio

Dataset

- Download the cf_ANLT5010_W3_Grades.csv file from the Week 3 Welcome announcement in the course announcements or the Week 3 assignment area.

Access the SAS OnDemand for Academics Control Center

<https://odamid.oda.sas.com/SASODAControlCenter>



The screenshot shows a web browser window with the title 'SAS® Logon Manager'. The address bar displays the URL: https://odamid.oda.sas.com/SASLogon/login?service=https%3A%2F%2Fodamid.oda.sas.com%2FSASODAControlCenter%2Fj_spring_cas_security_check. The main content area has a dark blue background with the text 'Sign In to SAS®' in white. Below this is a white login form with two input fields: 'User ID:' and 'Password:'. A blue 'SIGN IN' button is positioned below the password field. At the bottom of the form is the SAS logo with the tagline 'THE POWER TO KNOW.' and a link to 'About'. Below the login form, there are links for 'Not registered or cannot sign in?', 'Forgot your password?', and 'Commonly Asked Questions'. At the bottom of the page, there is a section titled 'Current Events' with a yellow banner that reads 'Disruption: Resolving Login and Registration Issues'. Below the banner, it states 'Last updated: 5/21/19 2:23:44 PM UTC' and 'Impacts: Registration'. A paragraph of text follows, stating that SAS and the SAS OnDemand for Academics team have made progress to resolve the login and registration issues, and provides contact information for further assistance.

Sign In to SAS®

User ID:

Password:

SIGN IN

SAS | THE POWER TO KNOW. [About](#)

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Not registered or cannot sign in?
Forgot your password?
Commonly Asked Questions

Current Events

Disruption: Resolving Login and Registration Issues

Last updated: 5/21/19 2:23:44 PM UTC
Impacts: Registration

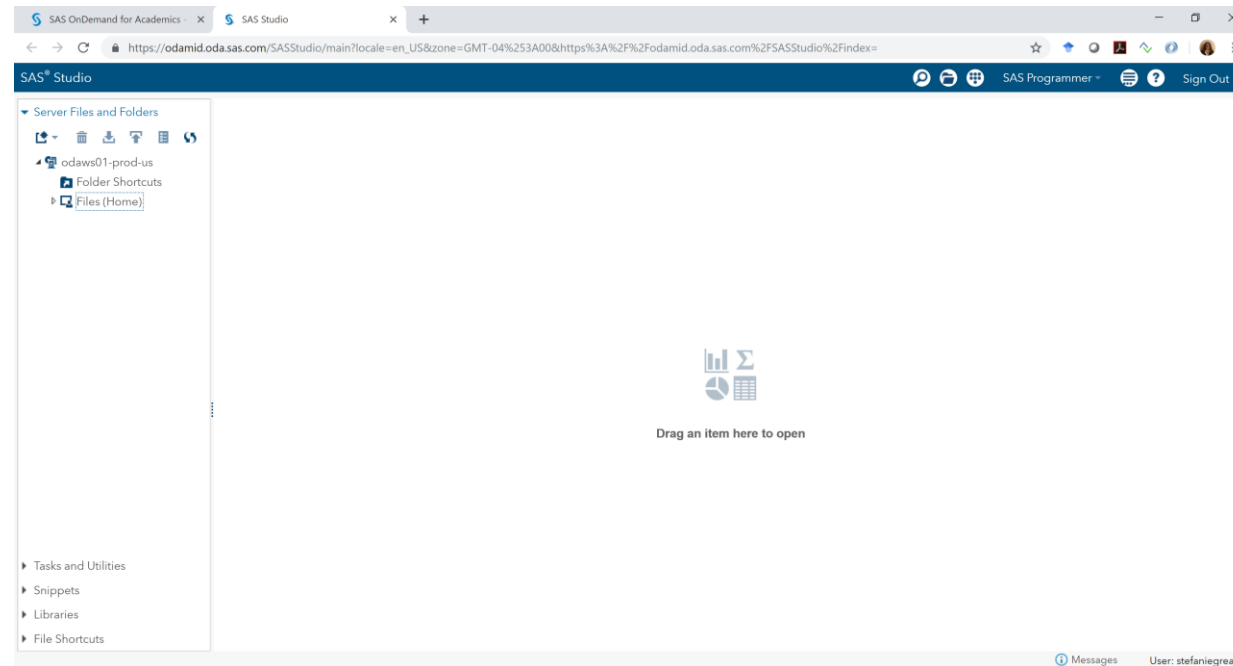
SAS and the SAS OnDemand for Academics team have made progress to resolve the login and registration issues. If you still encounter issues, please see our Commonly Asked Questions for help, and contact us at SASAnalyticsU@sas.com and state that you are experiencing issues with your SAS Profile. We appreciate your patience. Thank you for using SAS OnDemand for Academics.

SAS OnDemand for Academics (SODA) Control Center

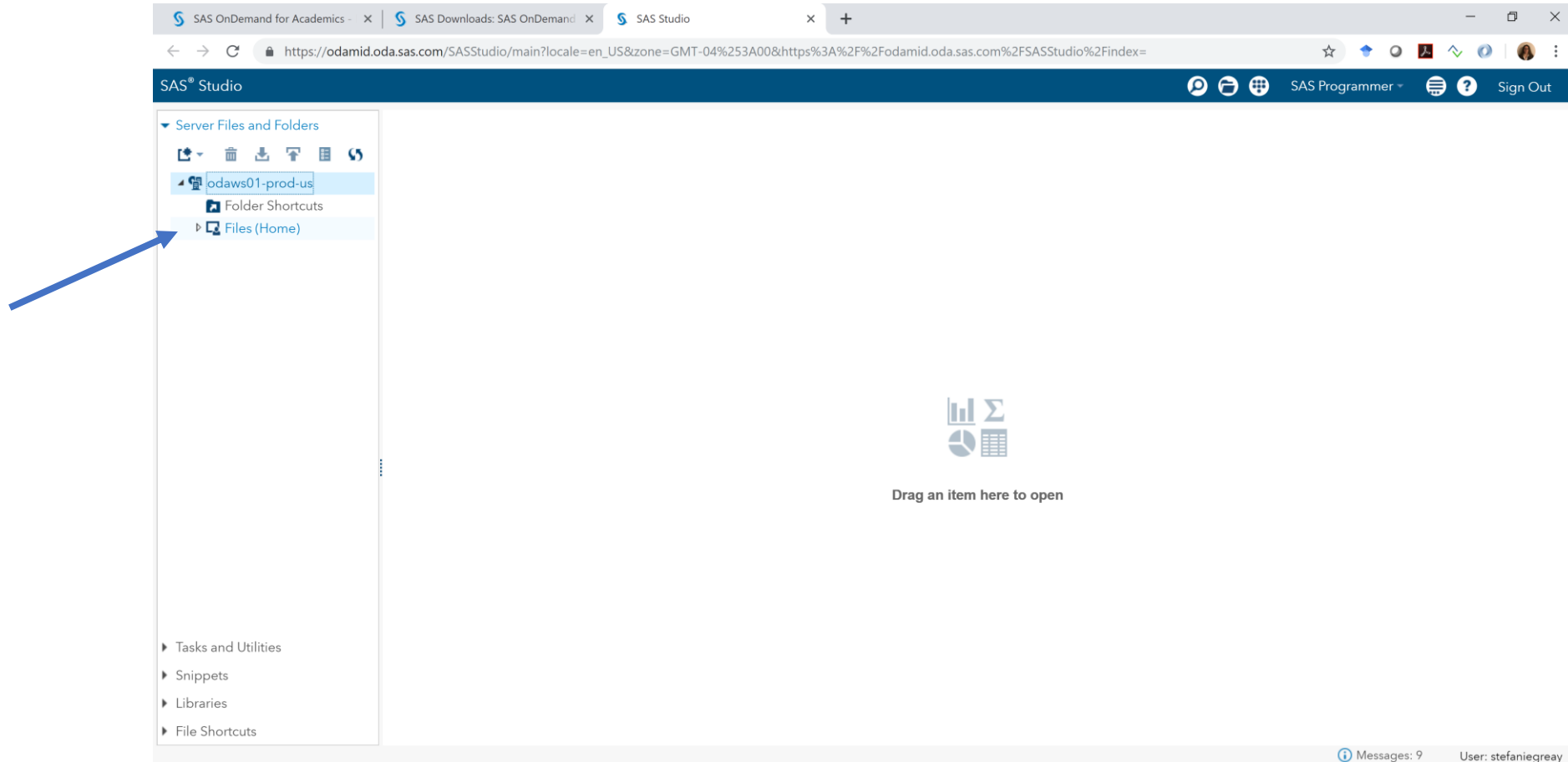
The screenshot displays the SAS OnDemand for Academics (SODA) Control Center dashboard. At the top right, the user is logged in as 'Stefanie Reay' from the 'United States' region. The dashboard title is 'SAS® OnDemand for Academics Dashboard'. Below the title are buttons for 'Planned Events' and 'Notices'. A message states: 'Your session in the United States region has timed out. You may now sign out to end this session as well or begin another regional session.' The main content area is divided into two columns. The left column has tabs for 'Applications', 'Enrollments', and 'Courses'. Under 'Applications', there are five items: 'SAS® Studio' (Write and run SAS code with a Web-Based SAS development environment. Actions: [Clear my saved tabs.](#)), 'SAS® Enterprise Guide®' (Deliver the power of SAS from an easy-to-use, point-and-click interface. (Download Required)), 'SAS® Enterprise Miner™' (Reveal valuable insights with powerful data mining software. (Configuration Steps Required) Actions: [Clear my project locks.](#)), 'SAS® Forecast Studio' (Generate large numbers of high-quality forecasts automatically. (Configuration Steps Required) Actions: [Manage your personal environment.](#)), and 'JMP® Software access to SAS® hosted servers' (Statistical discovery software. Users must have a copy of JMP® software. (Configuration Steps Required)). The right column has a 'Reference' section with links to 'Support Site', 'Step-by-Step Reference Guides', and 'Frequently Asked Questions'. Below this is a 'Quotas (learn more)' section showing two progress bars: 'Home Directory (22.5MB/5120MB)' at 0% and 'Course Directory (207.0MB/3072MB)' at 7%.

SAS Studio

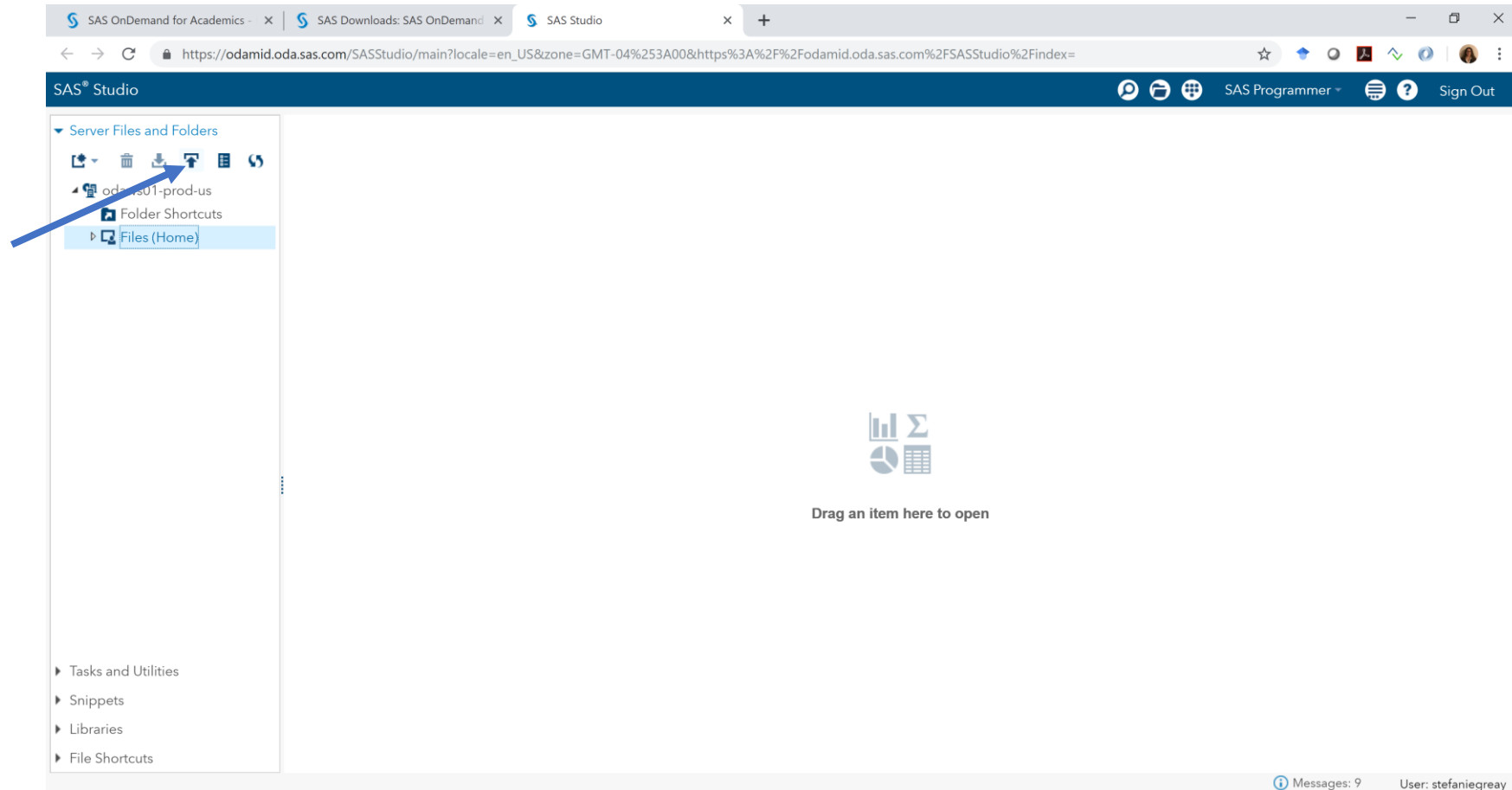
<https://odamid.oda.sas.com/SASStudio/>



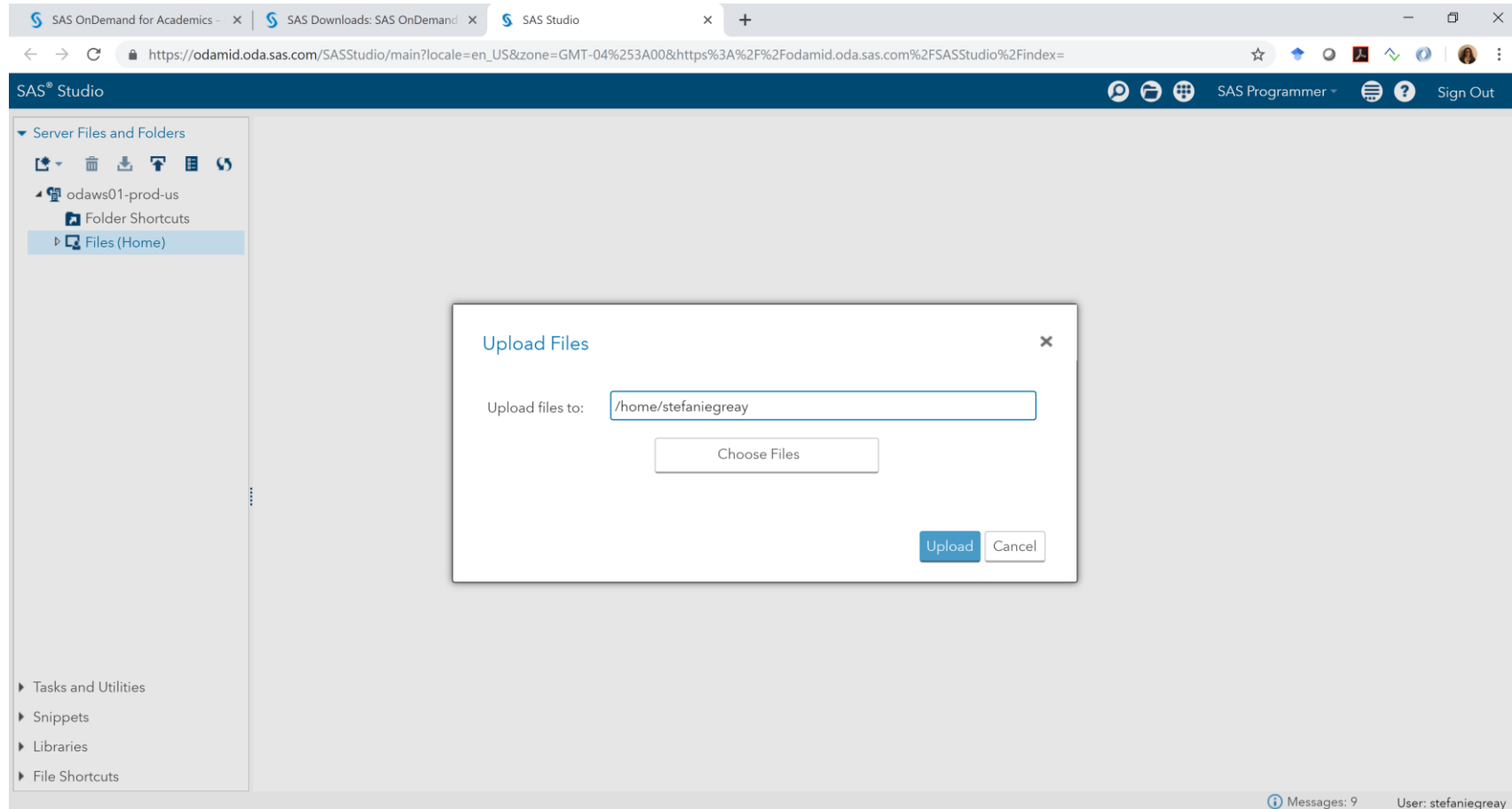
Click on Files(Home)



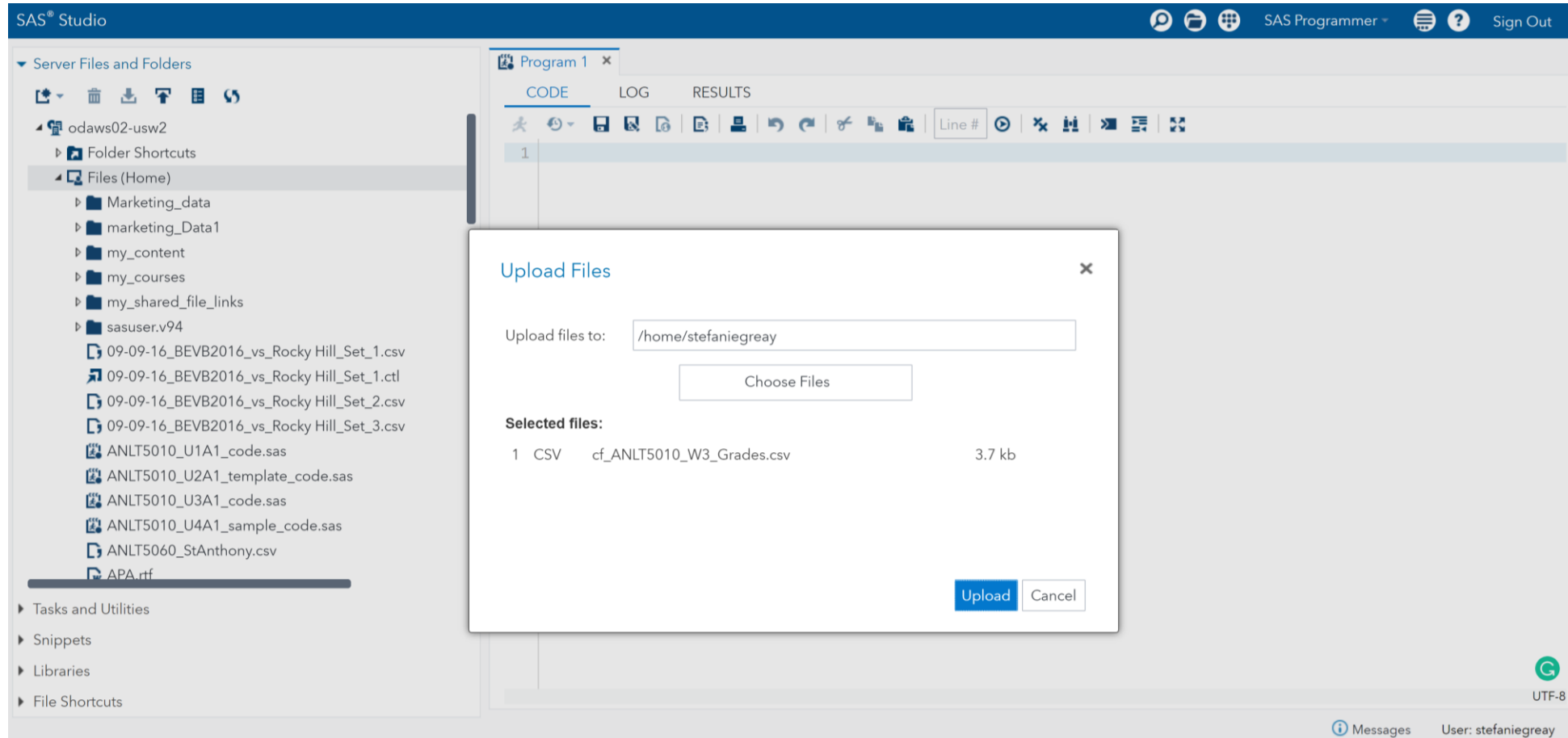
The Upload button will display in dark blue



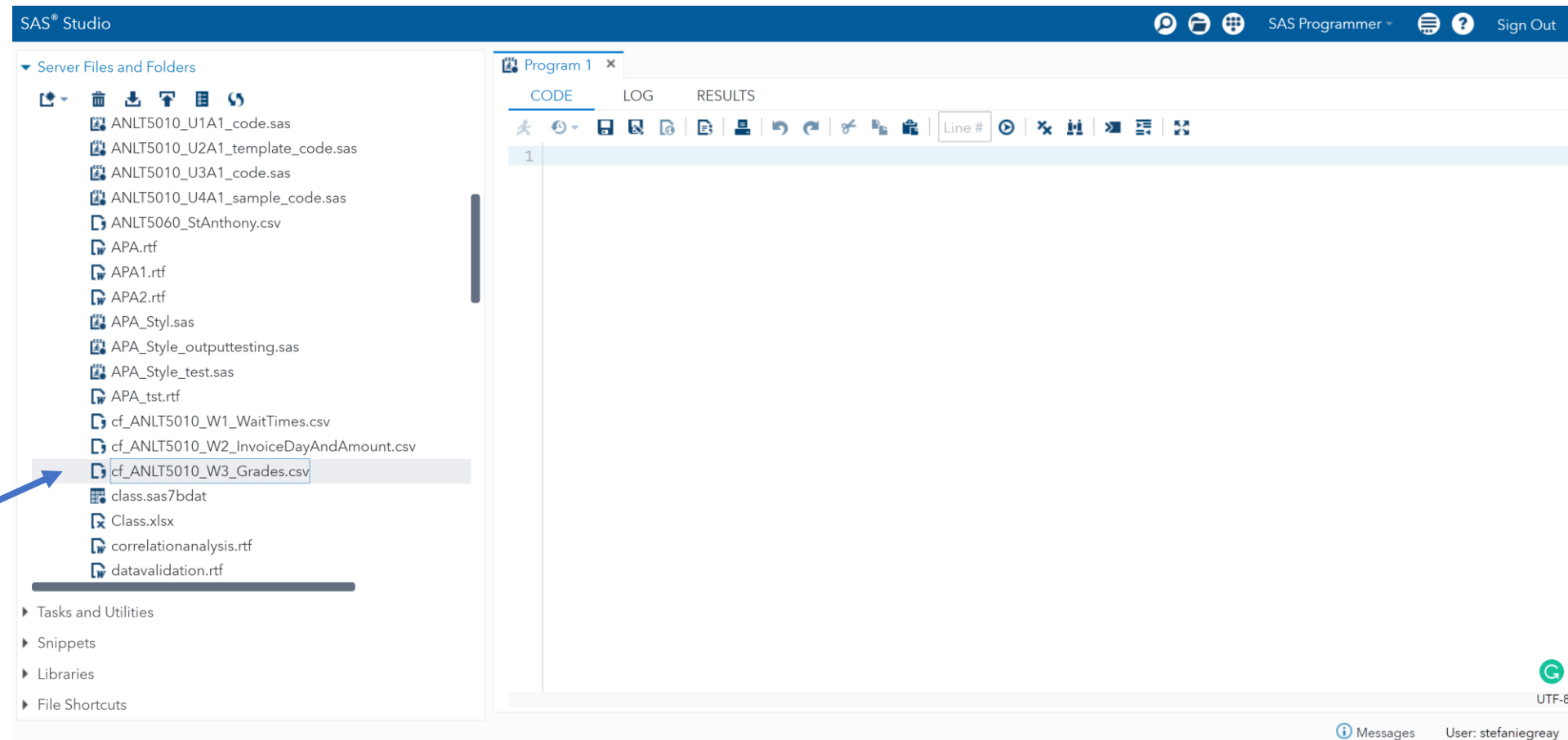
You can create a folder at this point, if you wish, or simply upload to your home directory.



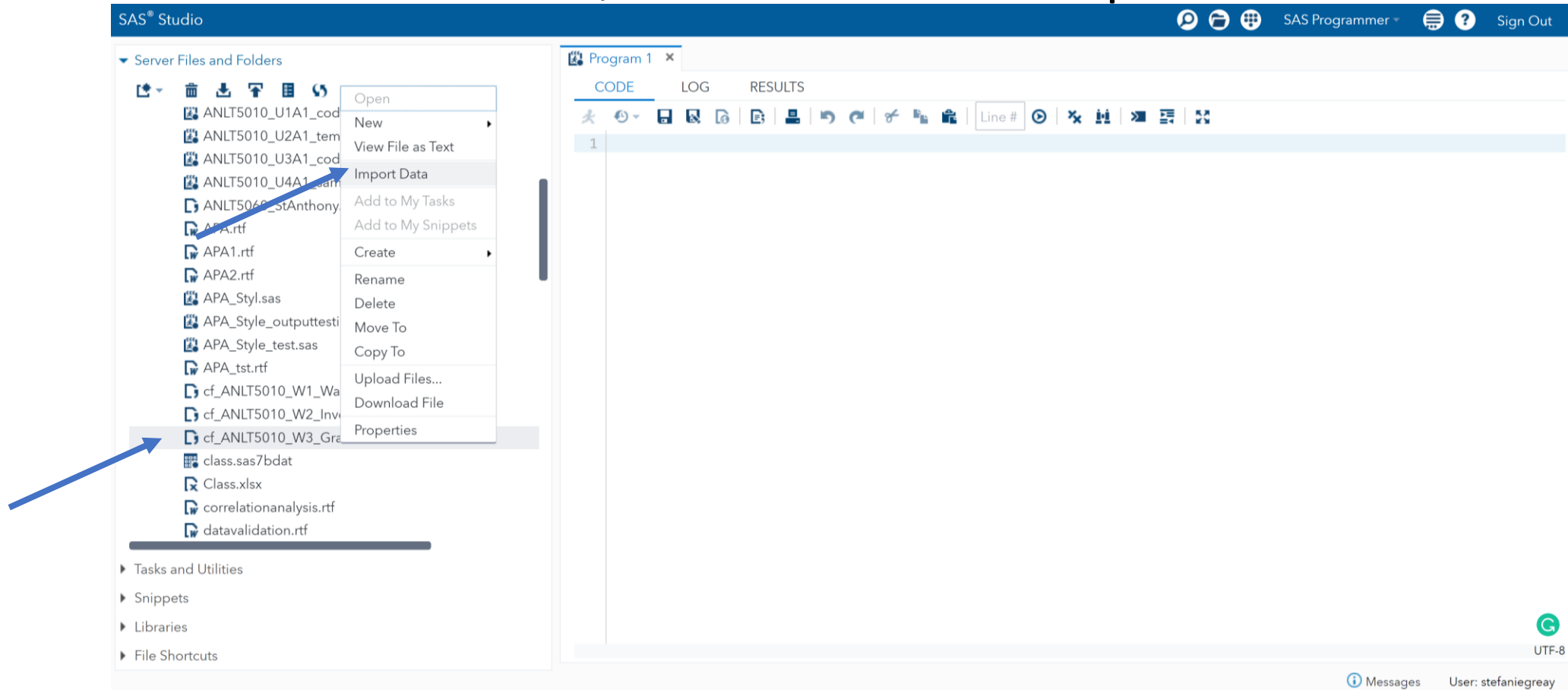
Select “Choose Files” to browse your computer for the dataset you want to upload. Once the dataset has been selected, click “Upload.”



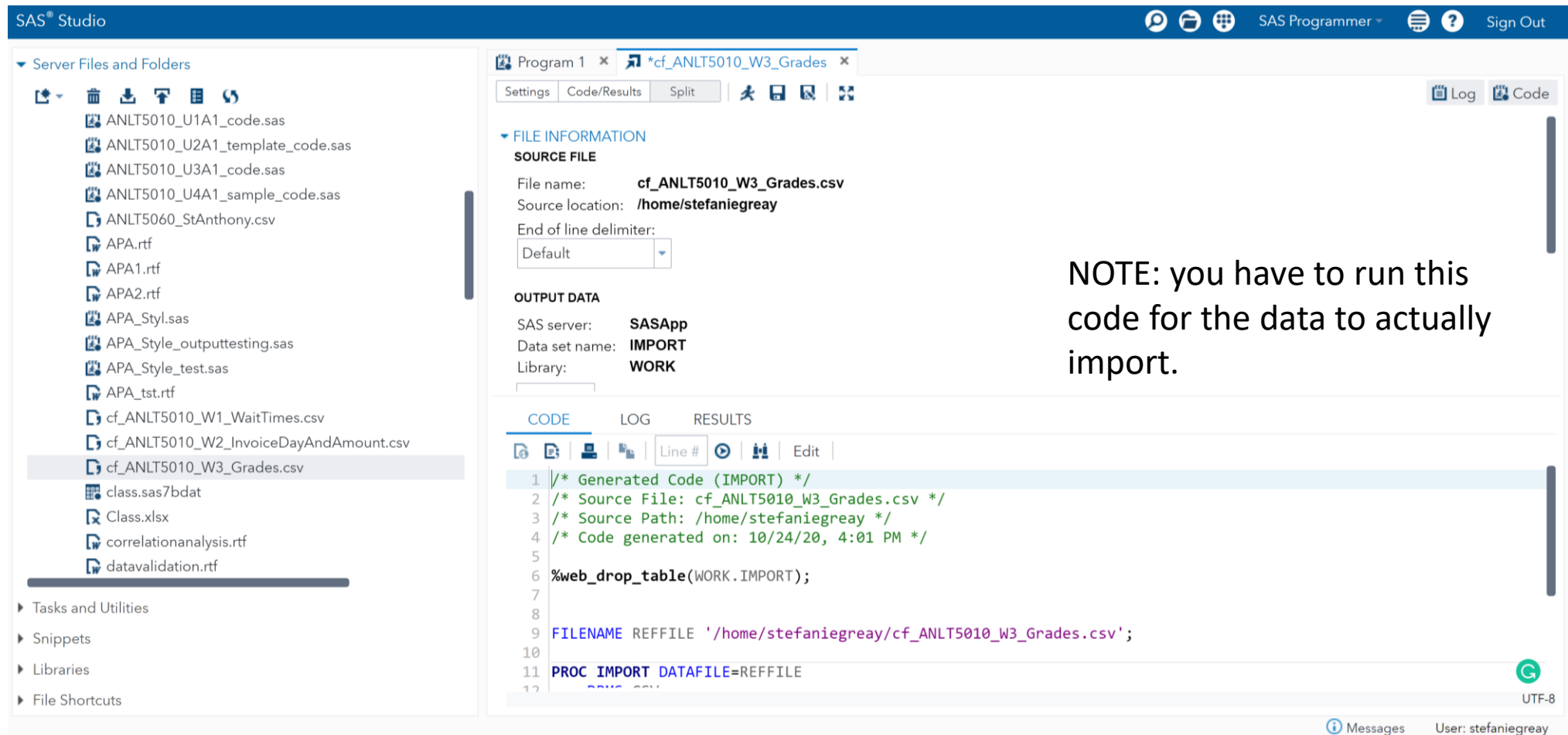
You will be able to view your files by clicking on “Files(Home)” to verify that your file successfully uploaded.



To import the dataset into a SAS dataset format (from the current csv format), right click on the name of the file, and select “Import Data.”



The Proc Import code will be written for you (save this as a template to use for future imports!)



The screenshot displays the SAS Studio interface. On the left, the 'Server Files and Folders' pane lists various files, with 'cf_ANLT5010_W3_Grades.csv' selected. The main window shows the 'Program 1' tab with the 'Code/Results' view. The 'FILE INFORMATION' section indicates the source file is 'cf_ANLT5010_W3_Grades.csv' located at '/home/stefaniegreay'. The 'OUTPUT DATA' section shows the SAS server is 'SASApp', the data set name is 'IMPORT', and the library is 'WORK'. The 'CODE' tab displays the generated SAS code for importing the CSV file. A note on the right states: 'NOTE: you have to run this code for the data to actually import.'

FILE INFORMATION

SOURCE FILE

File name: **cf_ANLT5010_W3_Grades.csv**
Source location: **/home/stefaniegreay**
End of line delimiter: **Default**

OUTPUT DATA

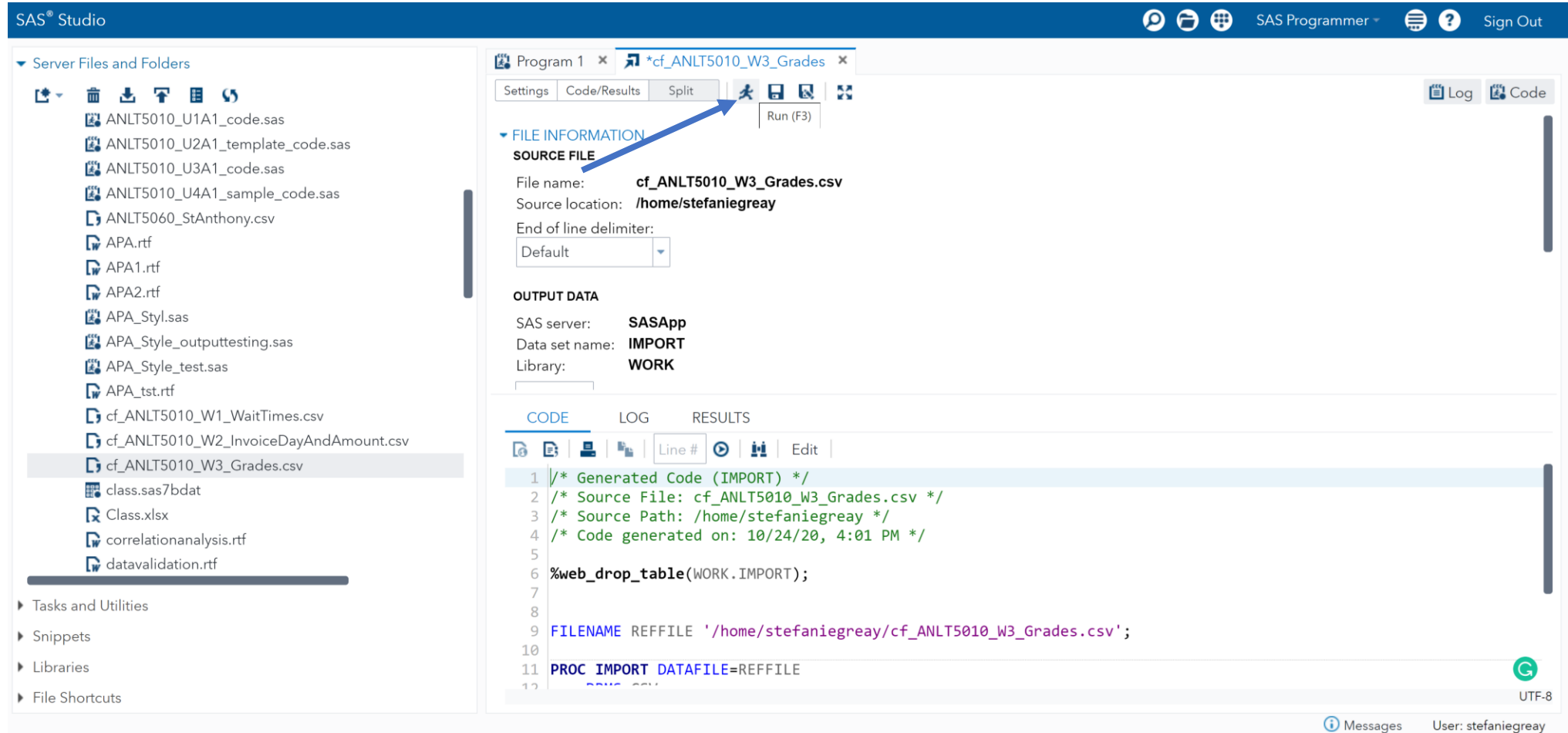
SAS server: **SASApp**
Data set name: **IMPORT**
Library: **WORK**

CODE LOG RESULTS

```
1 /* Generated Code (IMPORT) */  
2 /* Source File: cf_ANLT5010_W3_Grades.csv */  
3 /* Source Path: /home/stefaniegreay */  
4 /* Code generated on: 10/24/20, 4:01 PM */  
5  
6 %web_drop_table(WORK.IMPORT);  
7  
8  
9 FILENAME REFFILE '/home/stefaniegreay/cf_ANLT5010_W3_Grades.csv';  
10  
11 PROC IMPORT DATAFILE=REFFILE  
12
```

NOTE: you have to run this code for the data to actually import.

To run the code, click the icon that looks like a guy running.

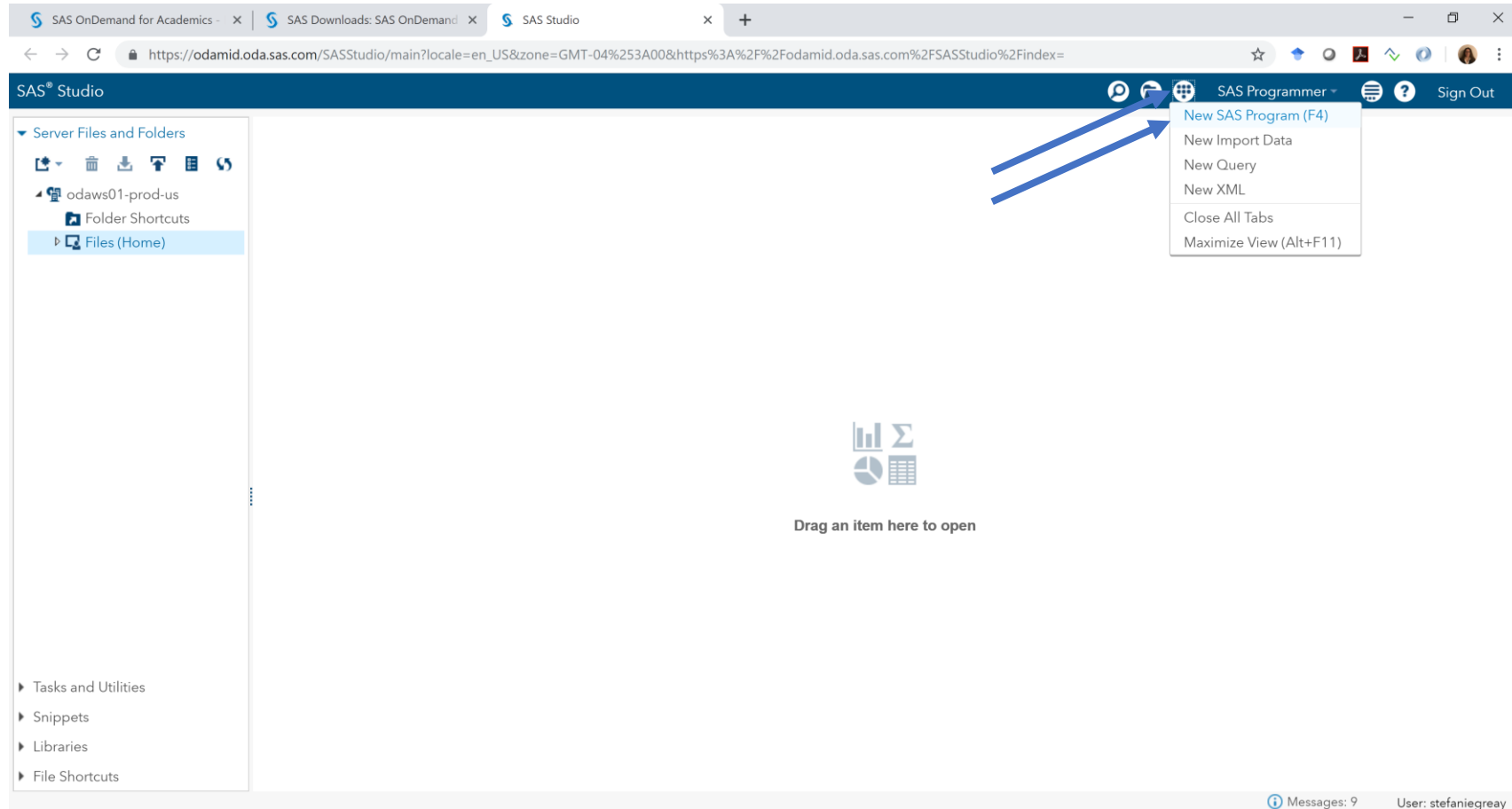


When you run the code, you will see the dataset and summary in the output data window and can verify its success.

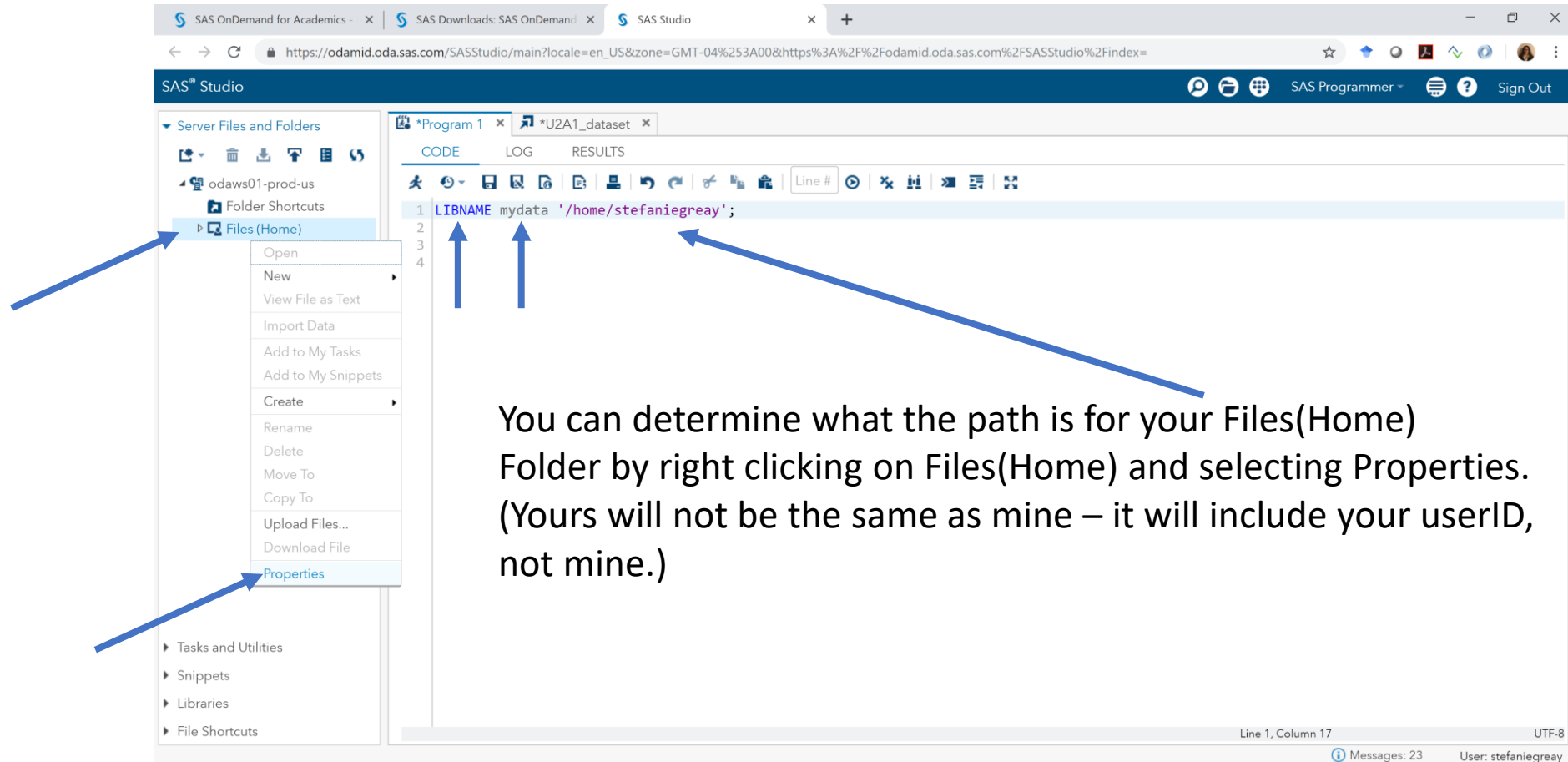
The screenshot displays the SAS Studio interface. On the left, the 'Server Files and Folders' pane shows a list of files, with 'cf_ANLT5010_W3_Grades.csv' selected. The main window is divided into two sections: 'SOURCE FILE' and 'OUTPUT DATA'. The 'SOURCE FILE' section shows the file name 'cf_ANLT5010_W3_Grades.csv', the source location '/home/stefaniegreay', and the end of line delimiter set to 'Default'. The 'OUTPUT DATA' section shows the SAS server 'SASApp', the data set name 'IMPORT', and the library 'WORK'. Below these sections, the 'RESULTS' tab is active, displaying a table of contents for 'The CONTENTS Procedure'. The table lists various metadata for the dataset 'WORK.IMPORT', including the number of observations (99), variables (6), and creation/modification dates.

The CONTENTS Procedure			
Data Set Name	WORK.IMPORT	Observations	99
Member Type	DATA	Variables	6
Engine	V9	Indexes	0
Created	10/24/2020 16:01:38	Observation Length	48
Last Modified	10/24/2020 16:01:38	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	SCL ASCII YR6 F4 I1M1Y YR6 F4 ALPHA TDRM I1M1Y IAR1		

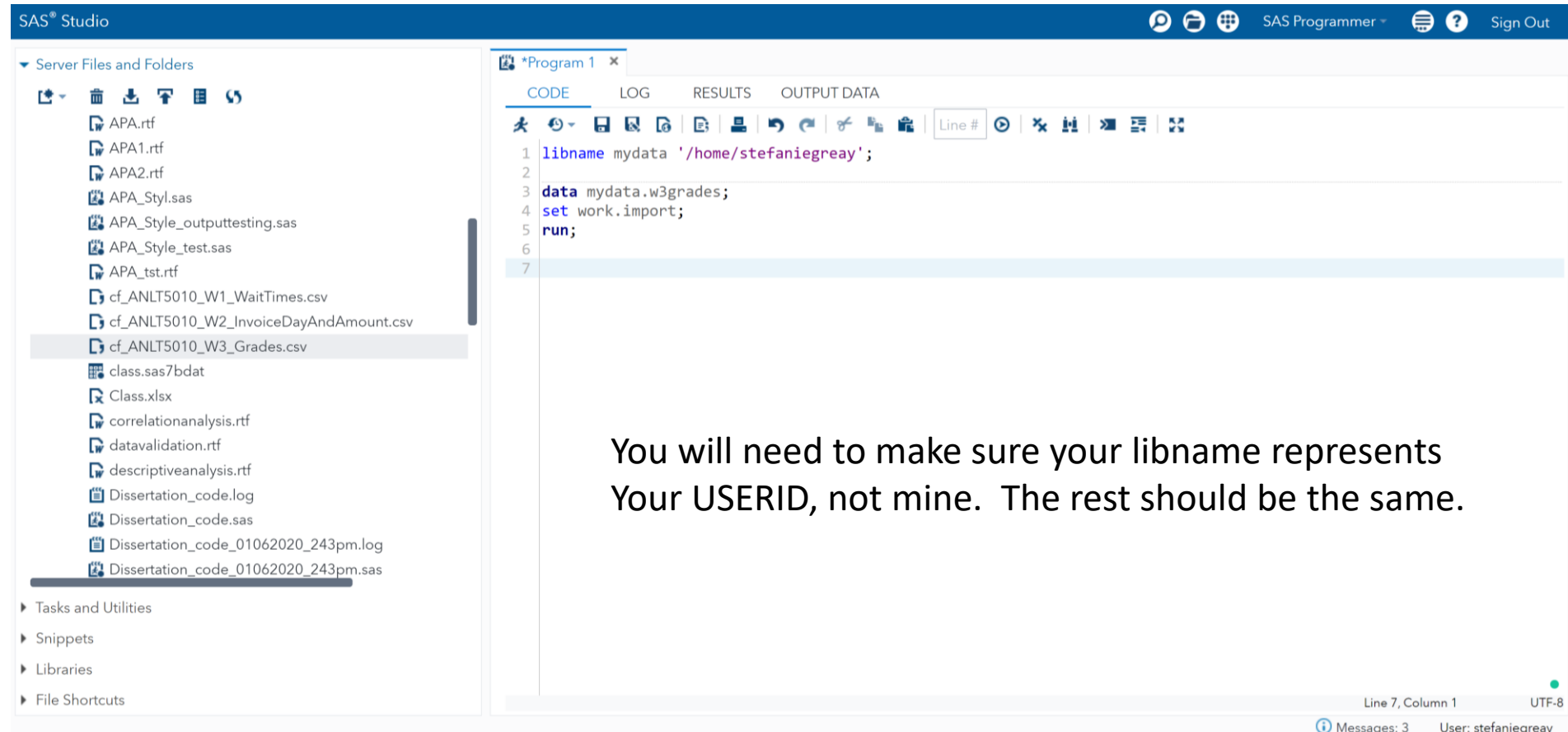
To get started with the SAS portion of the Week 2 Assignment 1 assignment, start a new SAS program.



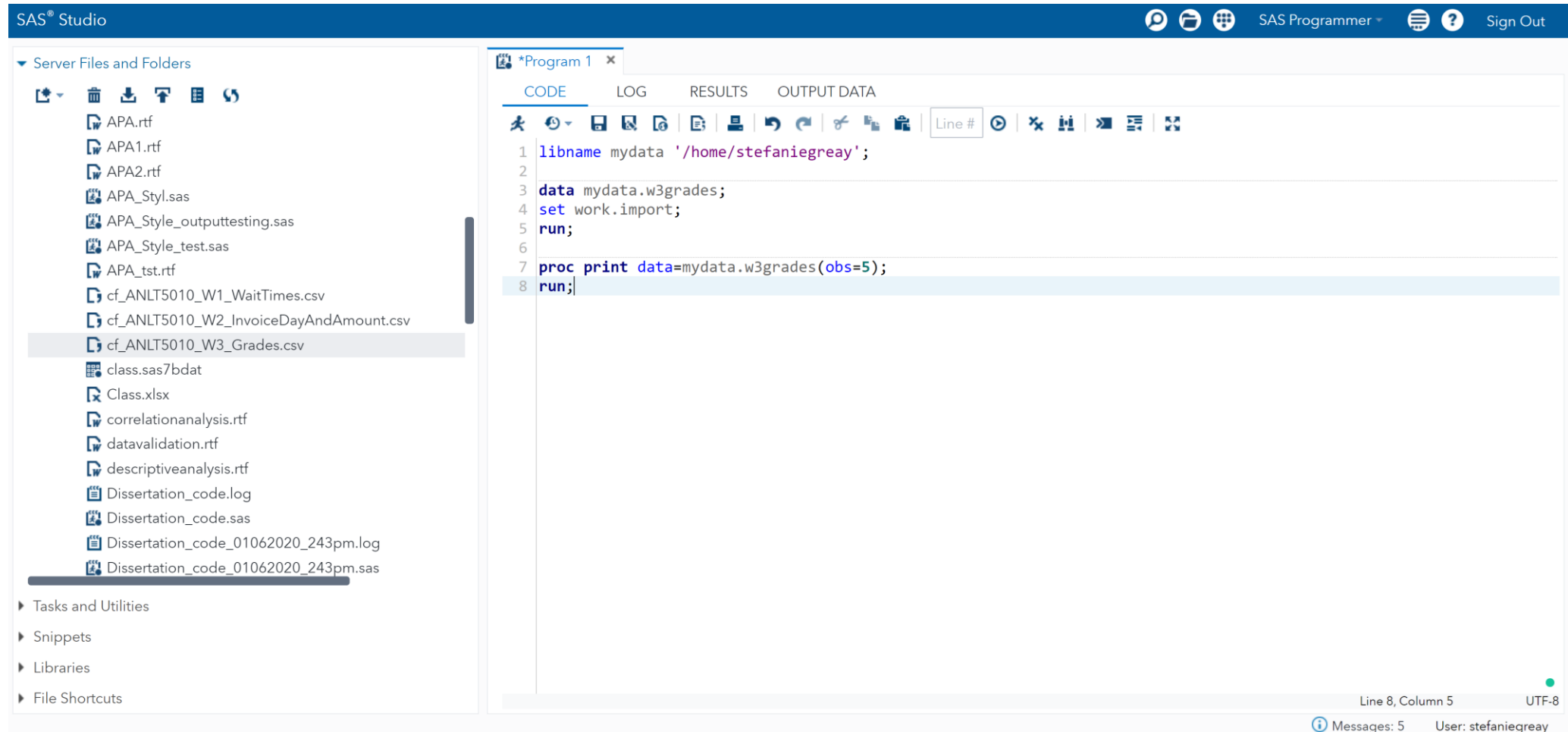
To create a SAS Library for your Files(Home) folder, you need to use a libname statement



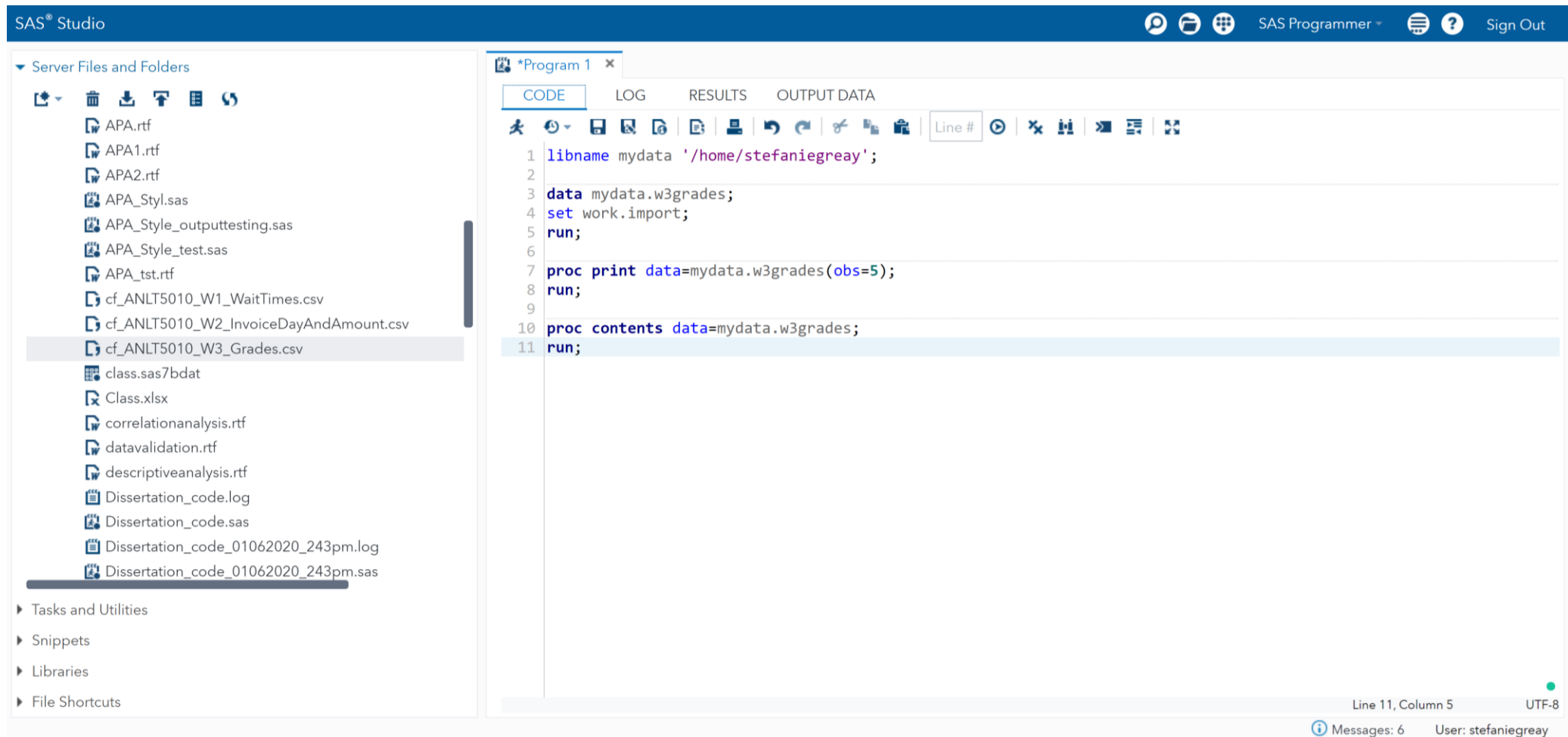
Save the temporary SAS dataset created by the import to your library using the following sample code.



Use a Proc Print statement to print the first 5 observations



Use a Proc Contents statement to look at the contents of the dataset



Review the Results pane to select a qualitative and quantitative variable to include in next steps

*Program 1

CODE LOG RESULTS OUTPUT DATA

Table of Contents

The CONTENTS Procedure

Data Set Name	MYDATA.W3GRADES	Observations	99
Member Type	DATA	Variables	6
Engine	V9	Indexes	0
Created	10/24/2020 16:11:10	Observation Length	48
Last Modified	10/24/2020 16:11:10	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	2722
Obs in First Data Page	99
Number of Data Set Repairs	0
Filename	/home/stefaniegray/w3grades.sas7bdat
Release Created	9.04015M6
Host Created	Linux
Inode Number	48991239
Access Permission	rw-r--r--
Owner Name	stefaniegray
File Size	256KB
File Size (bytes)	262144

Messages: 6 User: stefaniegray

*Program 1

CODE LOG RESULTS OUTPUT DATA

Table of Contents

Summary

Engine/Host Dependent Information

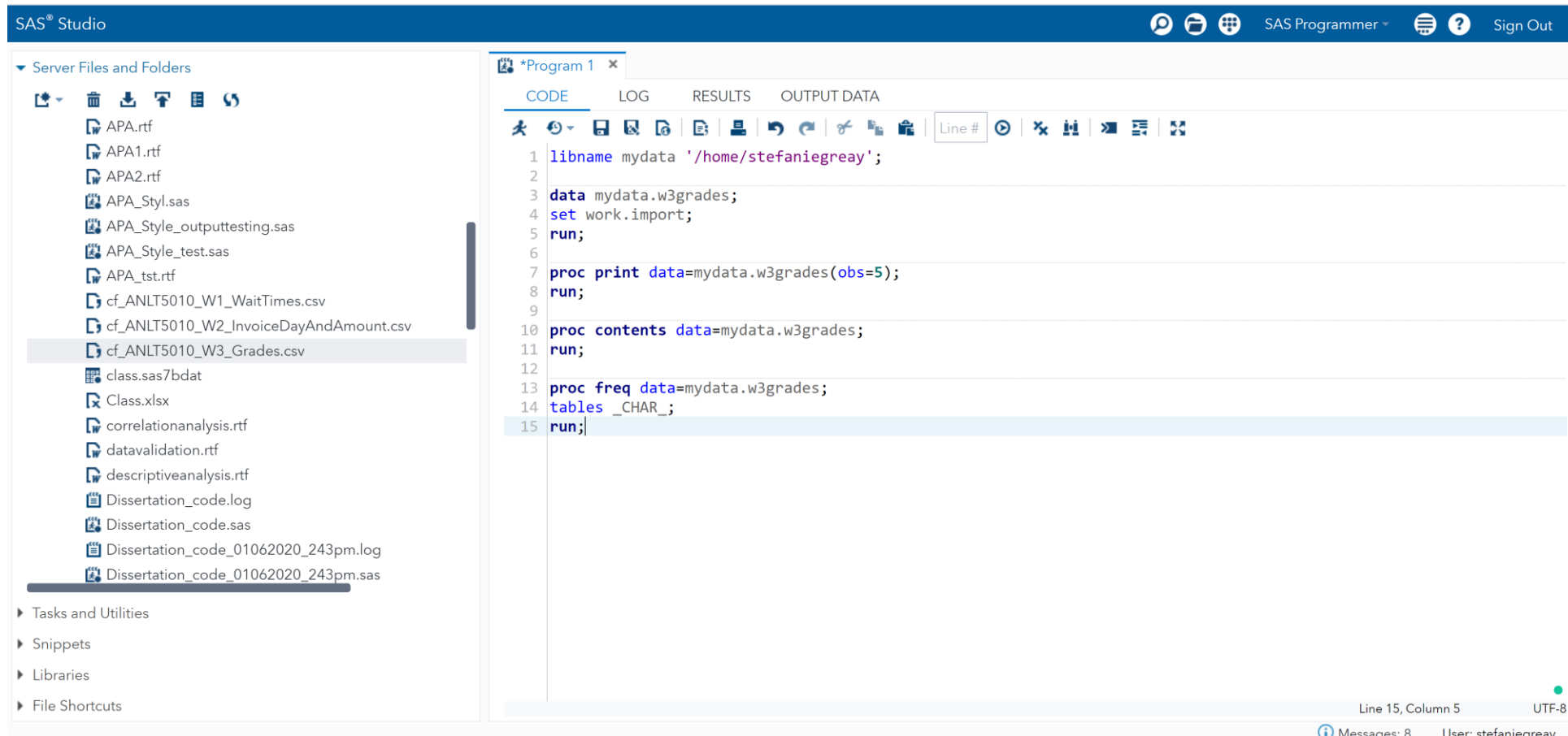
Data Set Page Size	131072
Number of Data Set Pages	1
First Data Page	1
Max Obs per Page	2722
Obs in First Data Page	99
Number of Data Set Repairs	0
Filename	/home/stefaniegray/w3grades.sas7bdat
Release Created	9.04015M6
Host Created	Linux
Inode Number	48991239
Access Permission	rw-r--r--
Owner Name	stefaniegray
File Size	256KB
File Size (bytes)	262144

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Format	Inform
2	Average of Assignments	Num	8	BEST12.	BEST32.
3	Average of Practice Grades	Num	8	BEST12.	BEST32.
6	Final	Num	8	BEST12.	BEST32.
4	Midterm	Num	8	BEST12.	BEST32.
1	Student Level	Char	8	\$8.	\$8.
5	TakeHome	Num	8	BEST12.	BEST32.

Messages: 6 User: stefaniegray

Use a Proc Freq statement to create a frequency table for a qualitative (categorical) variable(s) in the dataset

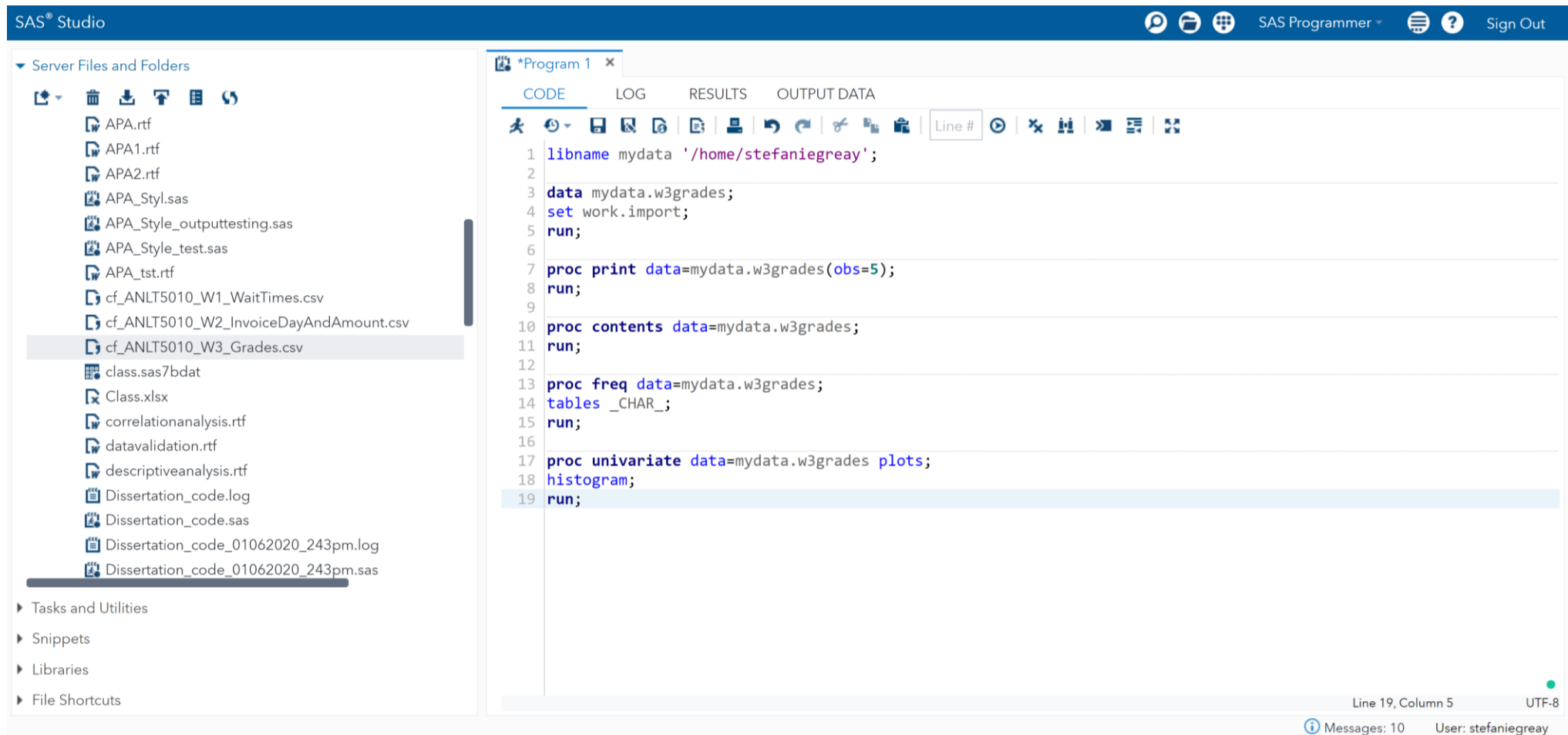


The screenshot displays the SAS Studio environment. On the left, the 'Server Files and Folders' pane lists various files, with 'cf_ANLT5010_W3_Grades.csv' selected. The main editor window, titled '*Program 1', shows a SAS program with the following code:

```
1 libname mydata '/home/stefaniegreay';
2
3 data mydata.w3grades;
4 set work.import;
5 run;
6
7 proc print data=mydata.w3grades(obs=5);
8 run;
9
10 proc contents data=mydata.w3grades;
11 run;
12
13 proc freq data=mydata.w3grades;
14 tables _CHAR_;
15 run;
```

The status bar at the bottom right indicates 'Line 15, Column 5' and 'UTF-8'. The bottom of the window shows 'Messages: 8' and 'User: stefaniegreay'.

Use a Proc Univariate to summarize the quantitative variable(s) in the dataset

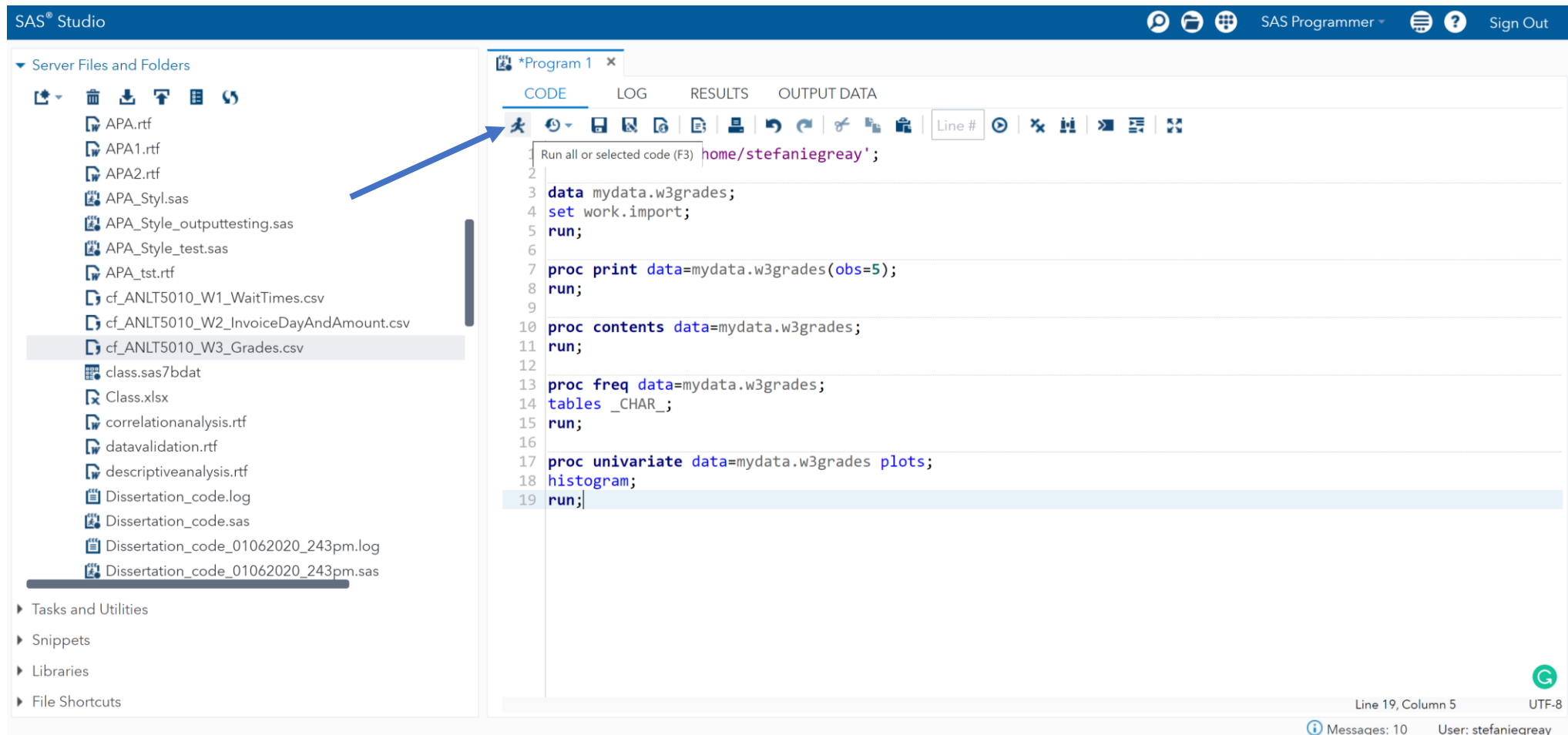


The screenshot displays the SAS Studio interface. On the left, the 'Server Files and Folders' pane shows a list of files, with 'cf_ANLT5010_W3_Grades.csv' selected. The main editor window, titled '*Program 1', shows a SAS program with the following code:

```
1 libname mydata '/home/stefaniegreay';
2
3 data mydata.w3grades;
4 set work.import;
5 run;
6
7 proc print data=mydata.w3grades(obs=5);
8 run;
9
10 proc contents data=mydata.w3grades;
11 run;
12
13 proc freq data=mydata.w3grades;
14 tables _CHAR_;
15 run;
16
17 proc univariate data=mydata.w3grades plots;
18 histogram;
19 run;
```

The status bar at the bottom indicates 'Line 19, Column 5' and 'UTF-8'. The bottom right corner shows 'Messages: 10' and 'User: stefaniegreay'.

To run the code, click the icon that looks like a guy running.



Full code (basic)

```
libname mydata '/home/stefaniegreay';
```

```
data mydata.w3grades;
```

```
set work.import;
```

```
run;
```

```
proc print data=mydata.w3grades(obs=5);
```

```
run;
```

```
proc contents data=mydata.w3grades;
```

```
run;
```

```
proc freq data=mydata.w3grades;
```

```
tables _CHAR_;
```

```
run;
```

```
proc univariate data=mydata.w3grades plots;
```

```
histogram;
```

```
run;
```