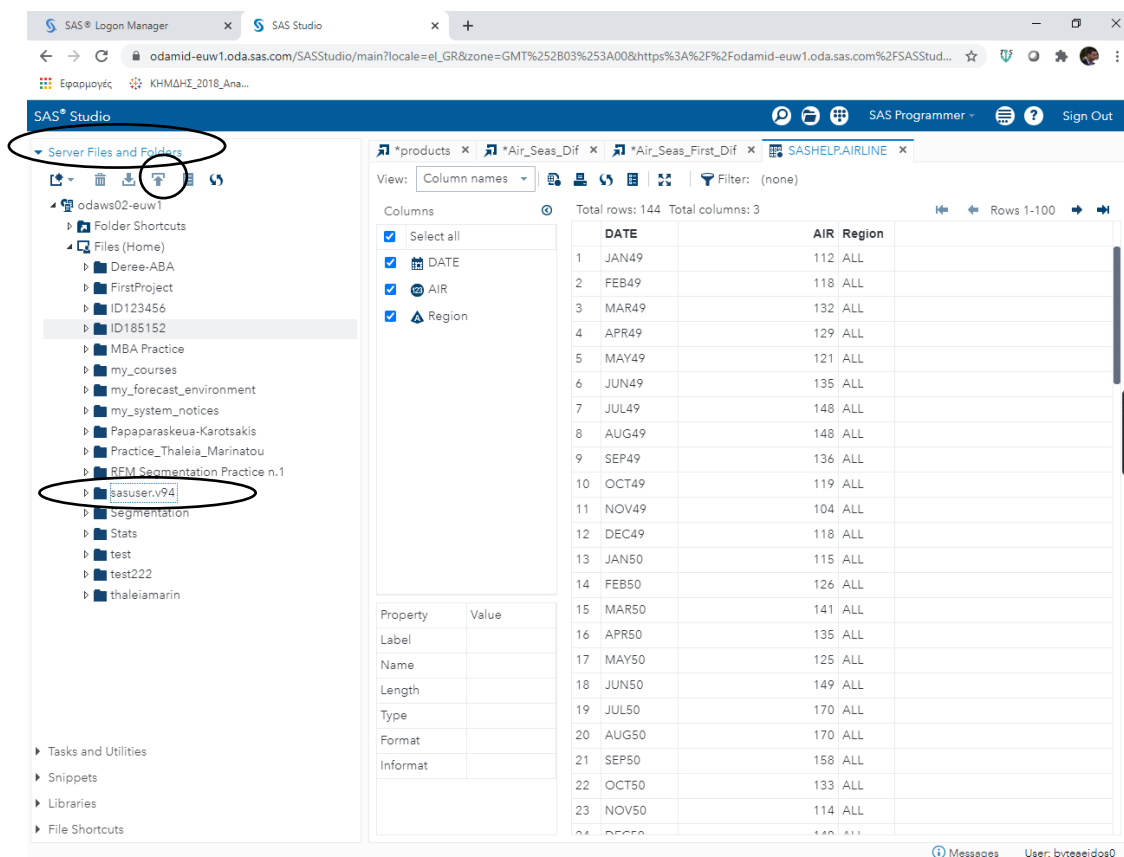


Exercise Unit Root – Seasonal Unit Root

- 1) Open google chrome
- 2) Go to welcome.oda.sas.com
- 3) Select Europe in the drop down menu and press sign in
- 4) Insert your credentials
- 5) In the dashboard select SAS Studio
- 6) On the left hand side select Server Files and Folders and then sasuser.v94
- 7) Press the upload button (the one with the arrow heading upwards).



- 8) Select the file “Sales_Data_Add-Decomp_For_SAS.sas7bdat”
- 9) Press Upload
- 10) Open SAS Forecast Studio
- 11) In the projects window press New.
- 12) In step 1 name the project “Unit_Root_Seasonal_Unit_Root” and press next.
- 13) In step 2 open the sasuser library, Select the “Sales_Data_Add-Decomp_For_SAS” data set and press next.

- 14) In step 3 press next
- 15) In step 4 select Date as the time id variable.
- 16) In step 5 select Sales as the dependent variable.
- 17) In step 6 press next
- 18) In step 7 set 8 in the Change the number of periods to forecast (horizon).
- 19) In step 8 press Finish.
- 20) In the Forecast Summary window double click on the Model Type box. What are the characteristics of the time series? Press close.
- 21) In the Forecasting view window, comment on the characteristics of the time series. Is your observation in line with the results of the previous step (model type)?
- 22) Select the Series View window.
- 23) Select Plots -- > Autocorrelation Analysis -- > Autocorrelation Function. What do you observe?
- 24) Select Plots -- > Seasonal Unit Root Tests. What do you conclude?
- 25) On the upper right corner select seasonal difference dependent (1).
- 26) Select Plots -- > Seasonal Unit Root Tests. What do you conclude?
- 27) On the upper right corner select simple difference dependent (1).
- 28) Select Plots -- > Time Series. Select Plots -- > Unit Root Tests. What do you conclude?