

APAC 2026

SAS EG Tips and Tricks from a Statistical
Programmer's Perspective

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Fortrea

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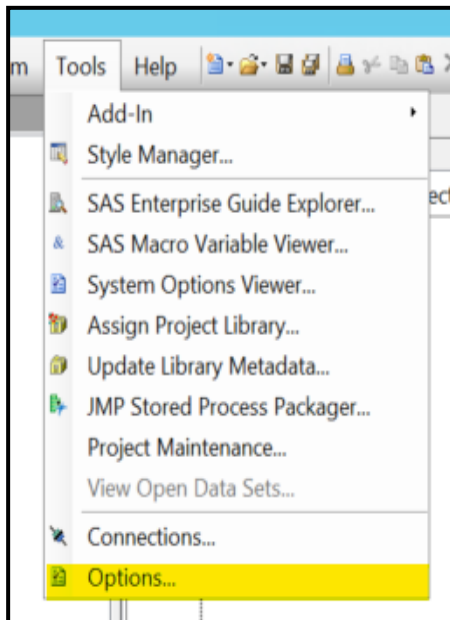
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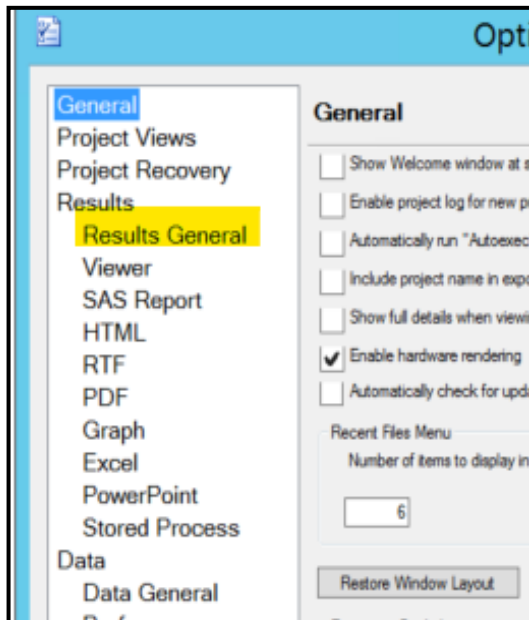


How to increase the number of output datasets

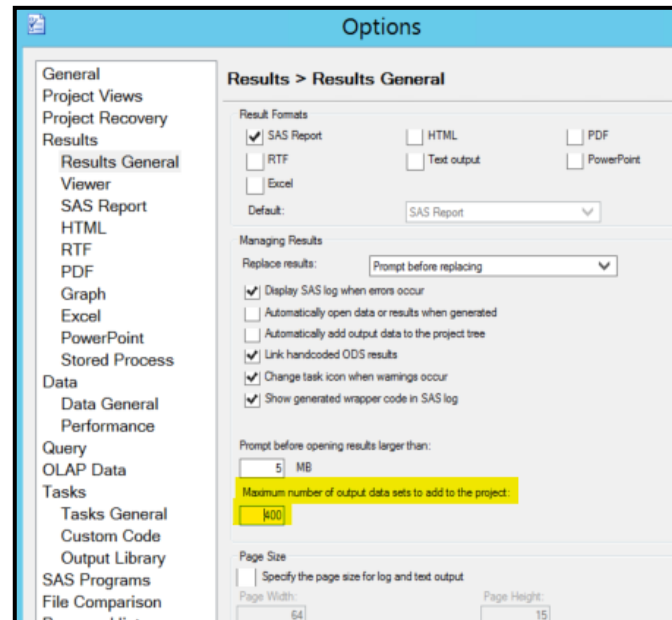
Click on 'Tools' in SAS® EG toolbar and select 'Options'



Click on 'Results General' in the 'Options' window



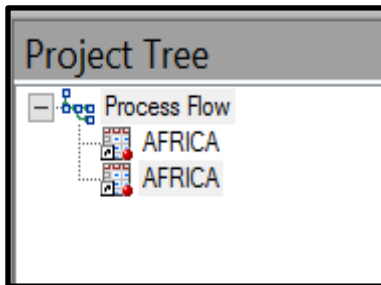
In 'Results General' update the maximum number of datasets as you may need



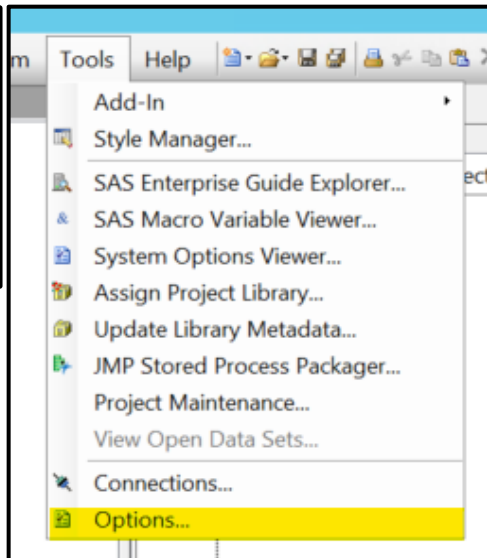


Displaying full path of the dataset

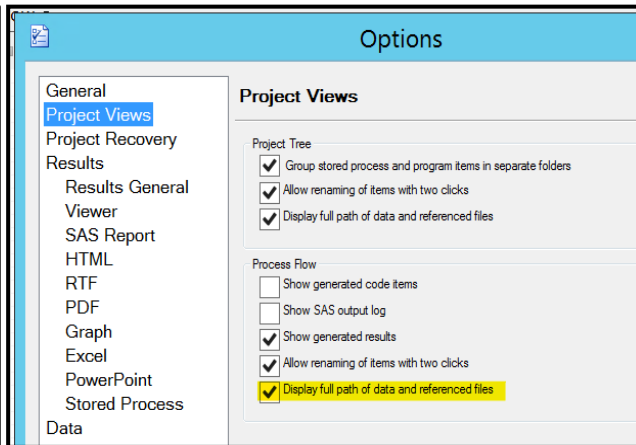
Before implementation



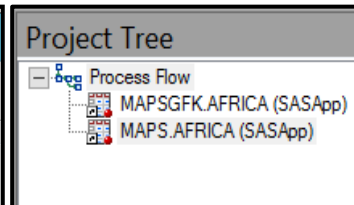
Click on 'Tools' in SAS® EG toolbar and select 'Options'



In 'Project Views' you will see the following line 'Display full path of data and referenced files' check this box



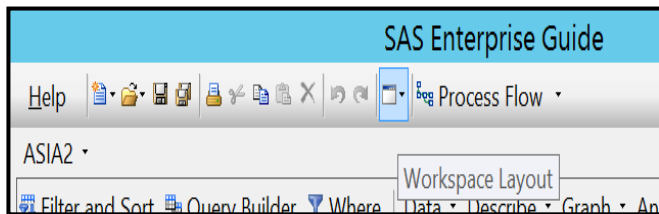
After implementation



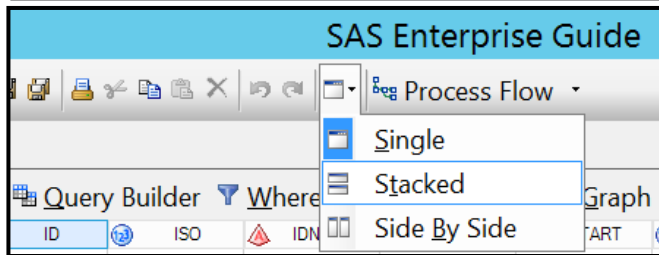


‘Stacked’ or ‘side by side’ datasets view options

Click on ‘Workspace Layout’ in the SAS® EG toolbar



Choose the ‘Stacked’ or ‘Side By Side’ option



Now we can open two different datasets in the same screen which become easy to compare and understand the data

ASIA

	CONT	ID	SEGMENT	DENSITY
41	95	110	1	6
42	95	110	1	6
43	95	110	1	5
44	95	110	1	6
45	95	110	1	6
46	95	110	1	2

ASIA2

	CONT	ID	ISO	IDNAME
1	95	110	004	AFGHANISTAN
2	95	181	048	BAHRAIN
3	95	182	050	BANGLADESH
4	95	200	064	BHUTAN
5	95	228	086	BRITISH INDIA
6	95	232	096	BRUNEI

Stacked view

ASIA

	CONT	ID	SEGMENT	DENSITY
41	95	110	1	6
42	95	110	1	6
43	95	110	1	5
44	95	110	1	6
45	95	110	1	6
46	95	110	1	2

ASIA2

	CONT	ID	ISO	IDNAME
1	95	110	004	AFGHANISTAN
2	95	181	048	BAHRAIN
3	95	182	050	BANGLADESH
4	95	200	064	BHUTAN
5	95	228	086	BRITISH INDIA
6	95	232	096	BRUNEI

Side-By-Side view



'Select distinct rows' option in query builder

Open the dataset you want to analyze, you will see an option called 'Query Builder' just above the dataset, click on this option

ASIA									
	CONT	ID	SEGMENT	DENSITY	X	Y	LAT		
1	95	110	1	4	0.33999016	-2.609042206	0.5947161123		
2	95	110	1	6	0.3397611217	-2.609787942	0.593988907		
3	95	110	1	6	0.3388052554	-2.61216605	0.591569652		
4	95	110	1	6	0.3384713501	-2.613196602	0.590556392		
5	95	110	1	3	0.3382942011	-2.6135824	0.5901539967		
6	95	110	1	4	0.3379308861	-2.614008821	0.5896352462		
7	95	110	1	3	0.3370547408	-2.614471334	0.5888595444		
8	95	110	1	6	0.336589577	-2.615697708	0.5876232696		
9	95	110	1	1	0.3365007166	-2.616152753	0.5872014811		
10	95	110	1	5	0.336559321	-2.616575661	0.5868718129		
11	95	110	1	4	0.336733519	-2.616961204	0.5866245426		
12	95	110	1	6	0.3369649352	-2.617434253	0.5863288214		
13	95	110	1	6	0.3372128805	-2.6177731416	0.5861882169		
14	95	110	1	3	0.3375182775	-2.618227461	0.5858634007		
15	95	110	1	5	0.3379832878	-2.618687908	0.58572279		
16	95	110	1	5	0.338861826	-2.619095205	0.5857664325		

The below pop-up window opens; we can choose the variables for which we need distinct rows and check the box for 'Select distinct rows only'

Query Builder for SASApp:MAPS.ASIA

Query name: Query Builder Output name: WORKQUERY_FOR_ASIA Change...

Computed Columns Prompt Manager Preview Tools

Add Tables X Delete

Select Data Filter Data Sort Data

t1 (ASIA)

- CONT
- ID
- SEGMENT
- DENSITY
- X
- Y
- LAT
- LONG

Column Name	Sour...
CONT (Numeric Rep. for C...	t1.C...
ID (GLC: Country ID Numb...	t1.ID

☒ Select distinct rows only

Run Save and Close Cancel Help

The below dataset is the output from query builder which displays the distinct rows based on the variables provided

Query Builder		
Modify Task Filter and Sort		
	CONT	ID
1	95	110
2	95	181
3	95	182
4	95	200
5	95	228
6	95	232
7	95	250
8	95	255
9	95	272
10	95	280
11	95	281



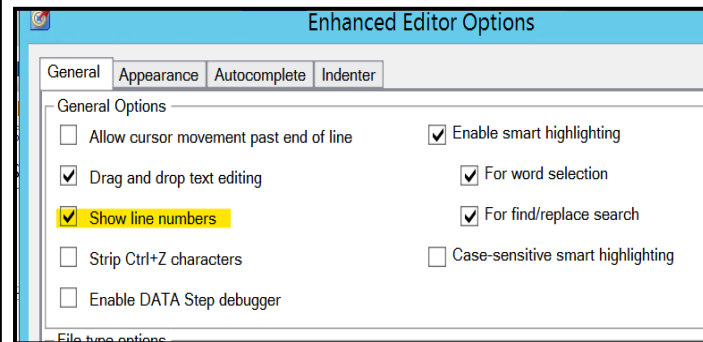
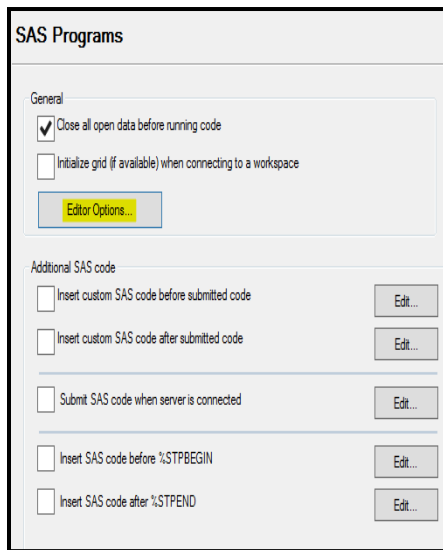
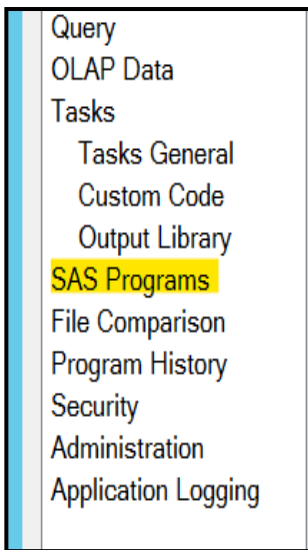
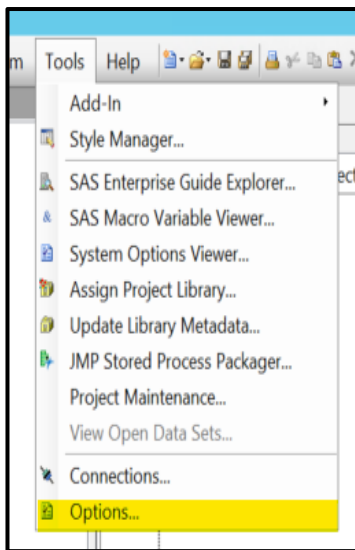
Adding line numbers to program

Click on 'Tools' in SAS® EG toolbar and select 'Options'

Click on 'Results General'

Click on the 'Editor Options...'

Once the 'Enhanced Editor Options' opens check the box corresponding to the line 'Show line numbers'



Continued in the next slide...



Adding line numbers to program

Program before adding line numbers

```
Program *
Save • Run • Stop | Selected Server: SASApp (Connected) • Analyze Program • Export • Send To • Create
set dm_step4;
if missing(AGE) then AGE=.;
if missing(SEX) then SEX="U"; /* Unknown */
if missing(RACE) then RACE="UNKNOWN";

run;

/*=====
Step 7: Sort and Deduplicate
=====*/
proc sort data=dm_step5 nodupkey; by USUBJID; run;

/*=====
Step 8: Create Final DM Dataset
=====*/
data sdtm.dm;
set dm_step5;
keep STUDYID DOMAIN USUBJID SUBJID SITEID AGE AGEU SEX RACE ARM ARMCD
run;

/*=====
Step 9: QC Checks
=====*/
proc contents data=sdtm.dm; run;

proc freq data=sdtm.dm;
tables SEX RACE ARM / missing;
run;

proc means data=sdtm.dm n mean min max;
```

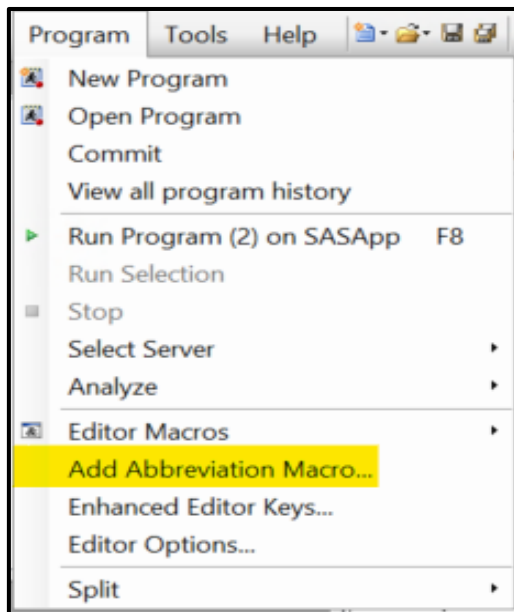
Program after adding line numbers

```
Program *
Save • Run • Stop | Selected Server: SASApp (Connected) • Analyze Program • Export • Send To • Create • Changes • Comm
99 set dm_step4;
100 if missing(AGE) then AGE=.;
101 if missing(SEX) then SEX="U"; /* Unknown */
102 if missing(RACE) then RACE="UNKNOWN";
103 run;
104
105 /*=====
106 Step 7: Sort and Deduplicate
107 =====*/
108 proc sort data=dm_step5 nodupkey; by USUBJID; run;
109
110 /*=====
111 Step 8: Create Final DM Dataset
112 =====*/
113 data sdtm.dm;
114 set dm_step5;
115 keep STUDYID DOMAIN USUBJID SUBJID SITEID AGE AGEU SEX RACE ARM ARMCD COUNTRY
116 run;
117
118 /*=====
119 Step 9: QC Checks
120 =====*/
121 proc contents data=sdtm.dm; run;
122
123 proc freq data=sdtm.dm;
124 tables SEX RACE ARM / missing;
125 run;
126
127 proc means data=sdtm.dm n mean min max;
```

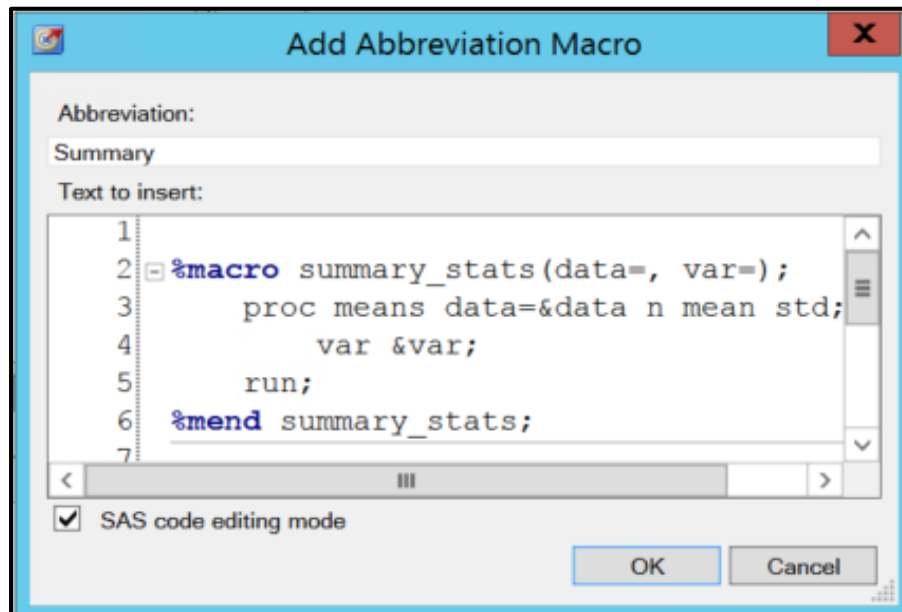


Add abbreviation macro

Click on Program and in the drop down select 'Add Abbreviation Macro...' option



Under 'Abbreviation' the key word can be added. In the 'Text to insert' section the code that is required can be added, once done click on 'OK'

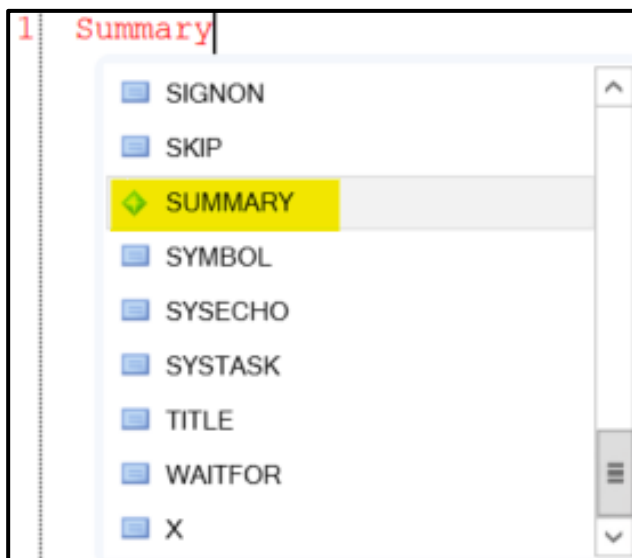


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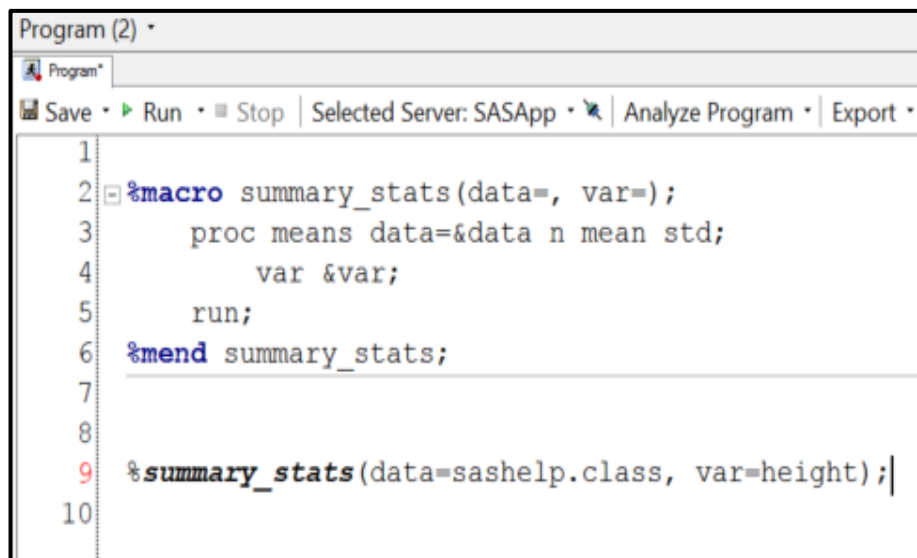


Add abbreviation macro

When required if the key word is typed out a drop down will be seen as shown below, If we select the option with the green mark the code we had inserted will auto populate



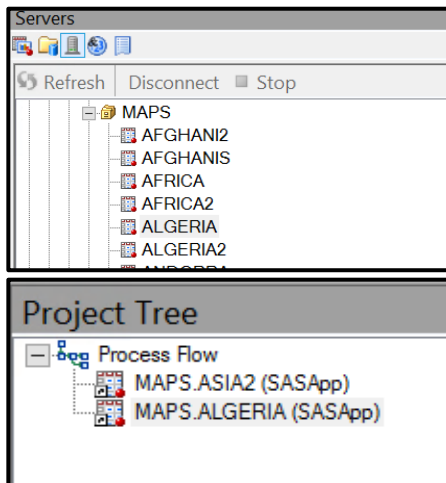
The below is auto populated code or text which was saved





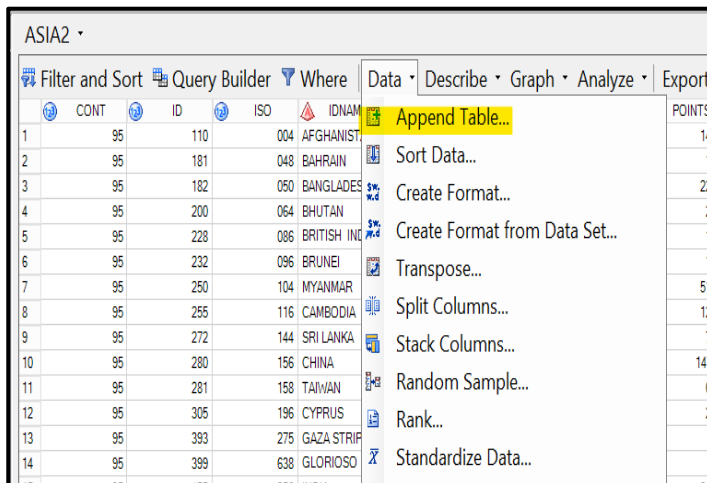
Stack datasets using append table option

From the respective server select and open the required datasets for stacking.

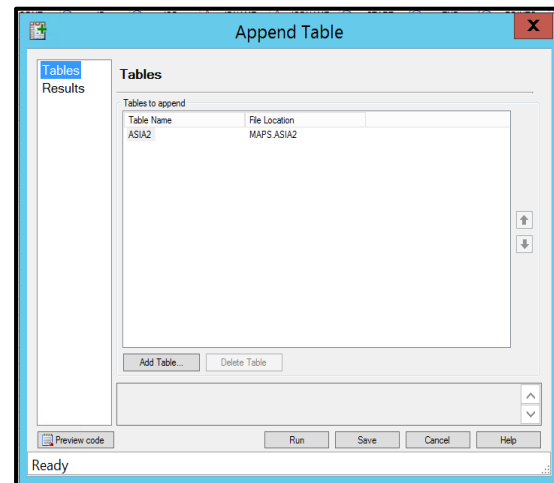


From the 'Project Tree' section open one of the required datasets.

Now select the 'Data' option from the Data Grid Toolbar



You will see the below Window pop up. Which shows the already selected dataset and give an option to add additional tables for appending

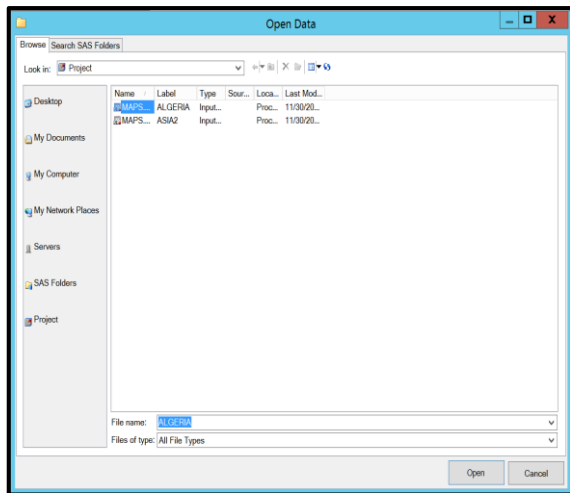


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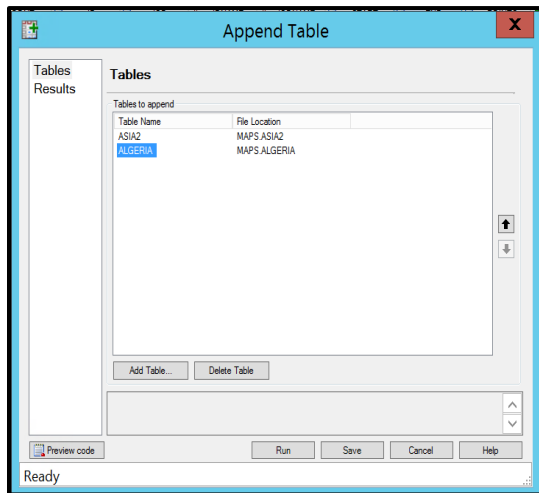


Stack datasets using append table option

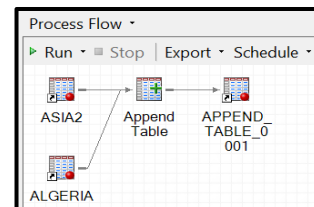
Once we select the option 'Add tables' then the file browse widow opens this shows us the list of datasets in our current project tree. Select the other datasets required to append.



Once we see the required datasets in the 'Append Table' window, select the run option



Once the run is complete, the new Appended Table is displayed



	CONT	ID	ISO	IDNAME	ISONAME	START	END
1	95	110	004	AFGHANISTAN	AFGHANISTAN	1	1456
2	95	181	048	BAHRAIN	BAHRAIN	1457	1584
3	95	182	050	BANGLADESH	BANGLADESH	1585	3867
4	95	200	064	BHUTAN	BHUTAN	3868	4159
5	95	228	086	BRITISH INDIA..	BRITISH INDIA..	4160	4320
6	95	232	096	BRUNEI	BRUNEI DARU..	4321	4482
7	95	250	104	MYANMAR	MYANMAR	4483	9648
8	95	255	116	CAMBODIA	CAMBODIA	9649	10852
9	95	272	144	SRI LANKA	SRI LANKA	10853	11640
10	95	280	156	CHINA	CHINA	11641	26405
11	95	281	158	TAIWAN	TAIWAN, PRO..	26406	27044
12	95	305	196	CYPRUS	CYPRUS	27045	27270
13	95	393	275	GAZA STRIP	PALESTINIAN..	27271	27291



Quick SAS shortcuts

Purpose	Shortcuts
Convert selected text to upper case	Ctrl + Shift + U
Convert selected text to lower case	Ctrl + Shift + L
Run or submit a program	Ctrl + F3
Comment the selected code	Ctrl + /
Uncomment the selected code	Ctrl + Shift + /
Go to specific row or column	Ctrl + G
Code Indentation	Ctrl + I



References and acknowledgment

REFERENCES

SAS Documentation: <https://support.sas.com/en/documentation.html>

SAS Help Center, SAS® Enterprise Guide® 8.3: User's Guide:

<https://documentation.sas.com/doc/en/egug/8.3/p1teiflqrhk7qnn16i4d6uburzlx.htm>

SAS Help Center, SAS® Enterprise Guide® 8.6:

<https://documentation.sas.com/doc/en/egcdc/8.6/egdccc/egamotasks/n0jnxoz7p3t2f3n13kc3hc4xzp0g.htm>

SAS BLOGS:

<https://blogs.sas.com/content/sasdummy/2011/11/17/sas-program-editor-abbrevs/>

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Thank You



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Data Science Community**

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