



INTEGO
GROUP

SAS and UNIX: Rerunning your batches in a smarter way

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Frankfurt 2018



Three ways to run batches

Batch N^on



Manual



"runbatch" file

```
X "sas ad_asl.sas"  
X "sas qc_ad_asl.sas"  
X "sas ad_aefga.sas"  
X "sas qc_ad_aefga.sas"
```

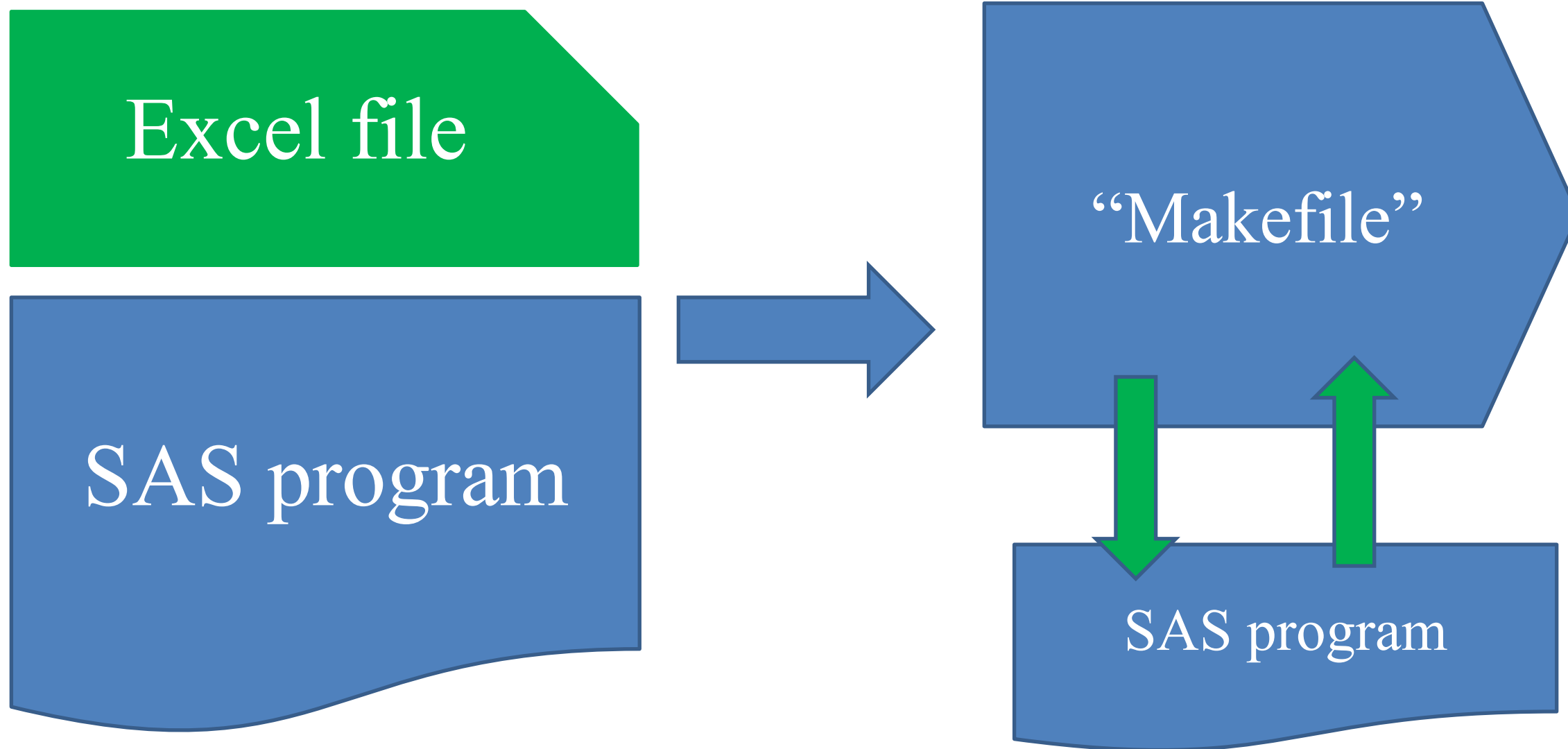
.....



"makefile"

???

Step-by-step solution



Structure of the “makefile”

target:

prerequisite1 ... prerequisiteN

<tab>command1
<tab>.....
<tab>commandN

t(target) > t(prerequisite1) ?
.....
t(target) > t(prerequisiteN) ?



A **target** is the name of a file that is generated by a program.

A **prerequisite** is a file that is used as an input to create the target.

A **command** is an action that should be run.

*.XLS input (Libraries)

Libname_	Path_
sdtm_1	/project1/study1/SDTMFOLDER/
sdtm_2	/project2/study2/SDTMFOLDER/
sdtm	./SDTMFOLDER
adam	./ADAMFOLDER
outputs	./outputsfolder

Libname_ : contains the name of libraries that are used in SAS program.

Path_ : contains the path to the folders where the files are located. Need to be consistent with UNIX command line.

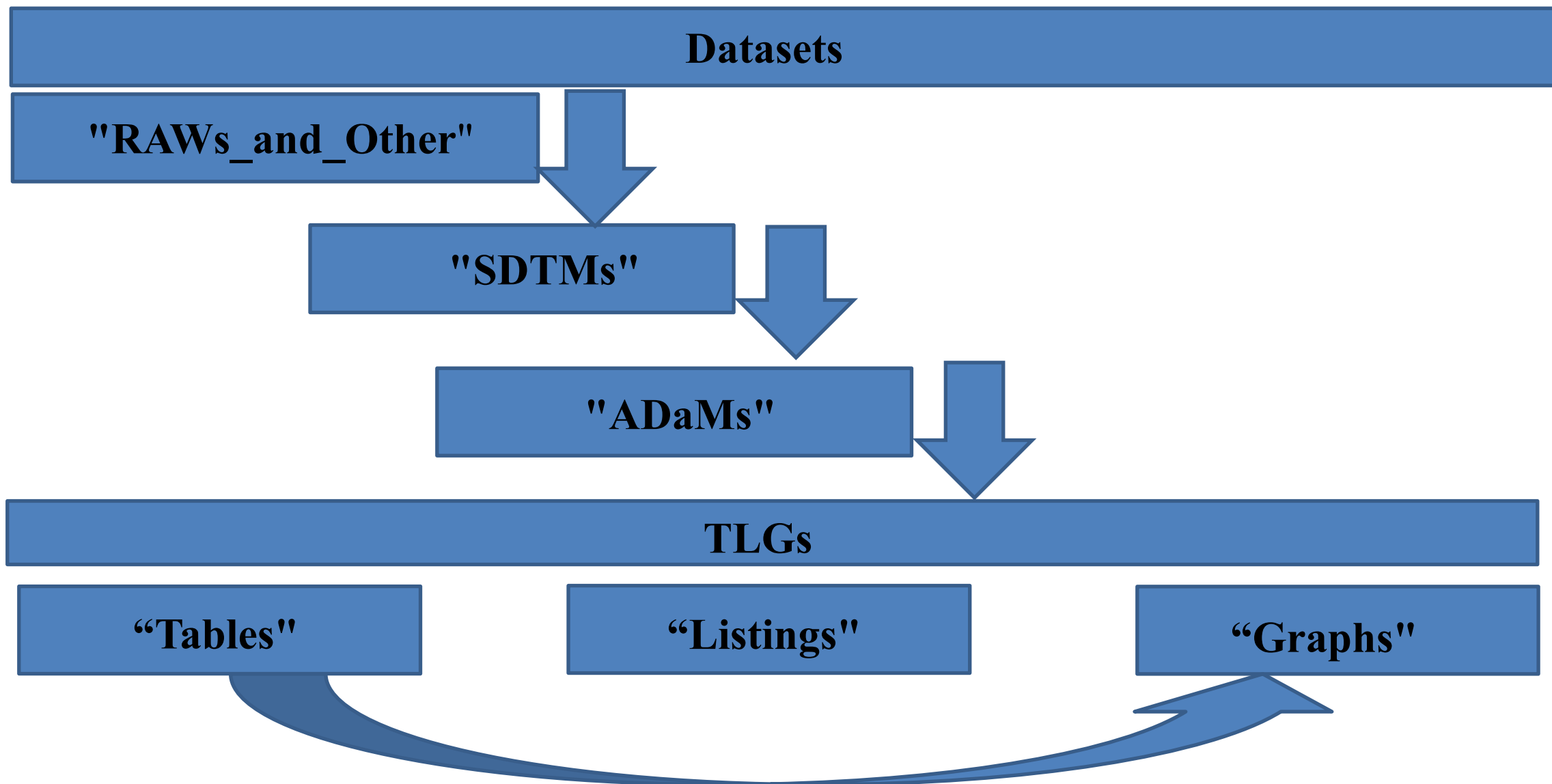
*.XLS input (Datasets)

Libname_	Dataset_	Relations_ Data	Relations_ Prog	Command_1	Command_QC
sdtm	DM	_empty_	_empty_	_empty_	_empty_
sdtm	AE	_empty_	_empty_	_empty_	_empty_
sdtm	ZA	_empty_	_empty_	_empty_	_empty_
adam	ASL	sdtm.DM	ad_asl.sas	sas ad_asl.sas	sas qc_ad_asl.sas
adam	AEFGA	sdtm.GA adam.ASL	ad_aefga.sas	sas ad_aefga.sas	sas qc_ad_aefga.sas

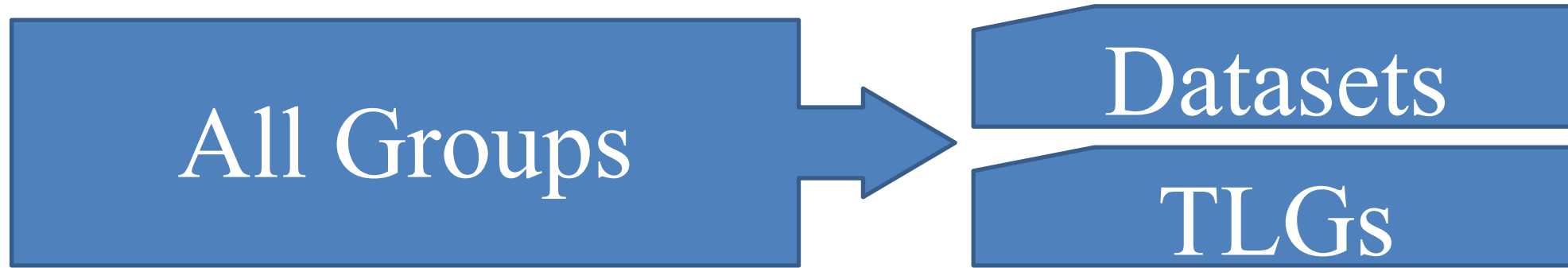
*.XLS input (TLGs)

Libname_	Output_	Relations_ Data	Relations_ Prog	Command_1	Command_QC
outputs	t_ga.out	adam.ASL adam.AEFGA	t_ga.sas	sas t_ga.sas	sas qc_t_ga.sas
outputs	l_ae_luc.out	ADAM.asl	l_ae_luc.sas	sas l_ae_luc.sas	_empty_

Grouping order



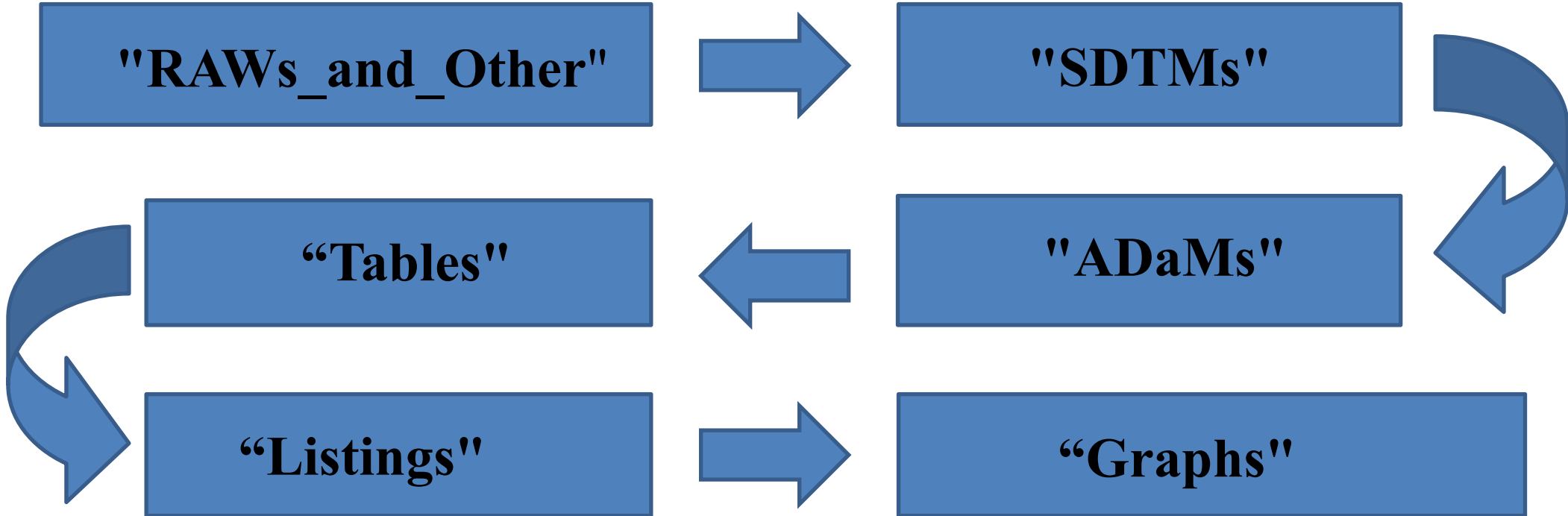
Sorting order



Libname_	Dataset_	Relations_ Data
sdtm	DM	_empty_
sdtm	ZA	_empty_
adam	ASL	sdtm.DM
adam	AEFGA	sdtm.ZA adam.ASL

Libname_	Dataset_	Relations_ Data
sdtm	DM	_empty_
sdtm	ZA	_empty_
adam	ASL	DELETED
adam	AEFGA	sdtm.ZA adam.ASL

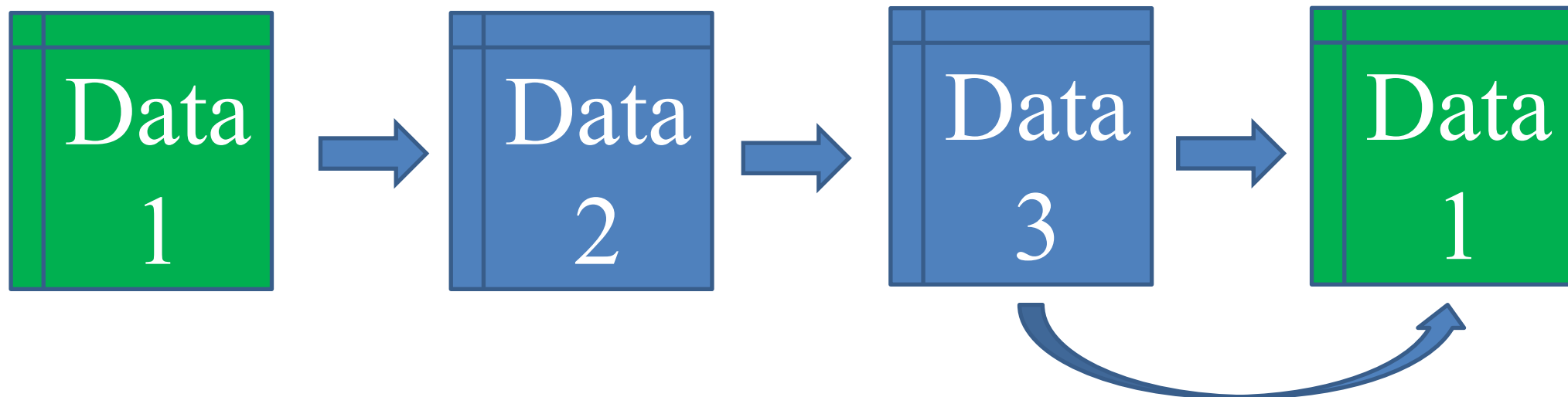
System:



“Chain” order

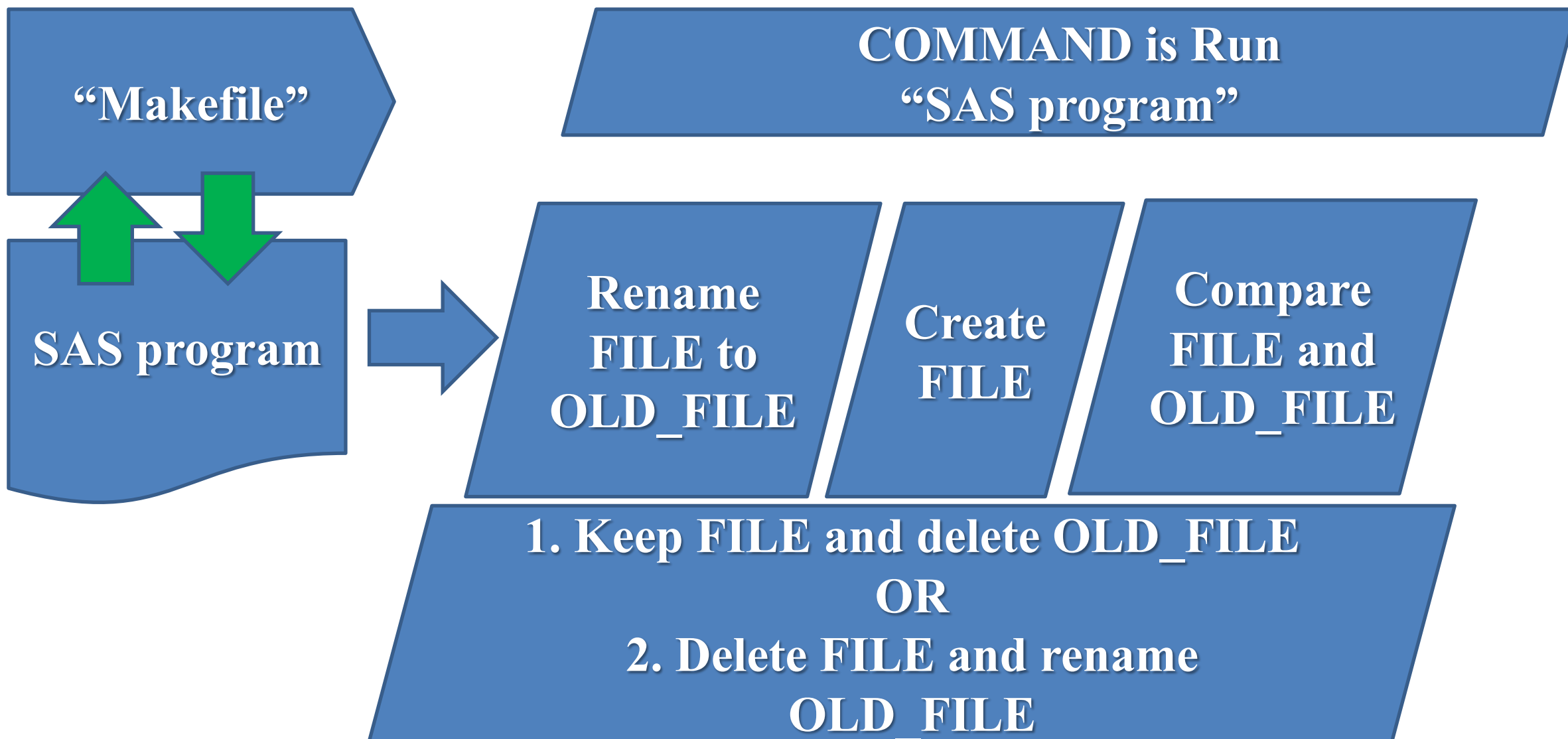


Not “Chain” order



Choosy Rerun

Rerun adam.ASL = Rerun everything ???





THANK YOU

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