<div style="border:1px solid">

cross — Form every pairwise combination of two datasets

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Description   Quick start   Menu   Syntax

Remarks and examples   References   Also see

Description

cross forms every pairwise combination of the data in memory with the data in *filename*. If *filename* is specified without a suffix, .dta is assumed.

Quick start

Form every pairwise combination of observations from mydata1.dta in memory with observations from mydata2.dta

    cross using mydata2

Menu

Data > Combine datasets > Form every pairwise combination of two datasets

Syntax

    cross using *filename*

cross does not allow alias variables; see [D] **frunalias** for advice on how to get around this restriction.

Remarks and examples

This command is rarely used; also see [D] **joinby**, [D] **merge**, and [D] **append**.

Crossing refers to merging two datasets in every way possible. That is, the first observation of the data in memory is merged with every observation of *filename*, followed by the second, and so on. Thus the result will have $N_1 N_2$ observations, where N_1 and N_2 are the number of observations in memory and in *filename*, respectively.

Typically, the datasets will have no common variables. If they do, such variables will take on only the values of the data in memory.

▷ Example 1

We wish to form a dataset containing all combinations of three age categories and two sexes to serve as a stub. The three age categories are 20, 30, and 40. The two sexes are male and female:

1

```
. input str6 sex
            sex
  1. male
  2. female
  3. end
. save sex
file sex.dta saved
. drop _all
. input agecat
          agecat
  1. 20
  2. 30
  3. 40
  4. end
. cross using sex
. list
```

	agecat	sex
1.	20	male
2.	30	male
3.	40	male
4.	20	female
5.	30	female
6.	40	female

◁

References

Baum, C. F. 2016. *An Introduction to Stata Programming*. 2nd ed. College Station, TX: Stata Press.

Franklin, C. H. 2006. Stata tip 29: For all times and all places. *Stata Journal* 6: 147–148.

Also see

[D] **append** — Append datasets

[D] **fillin** — Rectangularize dataset

[D] **frunalias** — Change storage type of alias variables

[D] **joinby** — Form all pairwise combinations within groups

[D] **merge** — Merge datasets

[D] **save** — Save Stata dataset