

**fillin** — Rectangularize dataset[Description](#)[Remarks and examples](#)[Quick start](#)[References](#)[Menu](#)[Also see](#)[Syntax](#)

## Description

`fillin` adds observations with missing data so that all interactions of *varlist* exist, thus making a complete rectangularization of *varlist*. `fillin` also adds the variable `_fillin` to the dataset. `_fillin` is 1 for observations created by using `fillin` and 0 for previously existing observations.

## Quick start

Add observations so that all possible interactions of `v1` and `v2` exist and flag new observations with `_fillin = 1`

```
fillin v1 v2
```

Same as above, but also include interactions with `v3`

```
fillin v1 v2 v3
```

## Menu

Data > Create or change data > Other variable-transformation commands > Rectangularize dataset

## Syntax

```
fillin varlist
```

*varlist* may not contain `strL`s or `alias` variables.

## Remarks and examples

### ► Example 1

We have data on something by sex, race, and age group. We suspect that some of the combinations of sex, race, and age do not exist, but if so, we want them to exist with whatever remaining variables there are in the dataset set to missing. For example, rather than having a missing observation for black females aged 20–24, we want to create an observation that contains missing values:

```
. use https://www.stata-press.com/data/r18/fillin1
. list
```

	sex	race	age_gr~p	x1	x2
1.	female	white	20-24	20393	14.5
2.	male	white	25-29	32750	12.7
3.	female	black	30-34	39399	14.2

```
. fillin sex race age_group
. list, sepby(sex)
```

	sex	race	age_gr~p	x1	x2	_fillin
1.	female	white	20-24	20393	14.5	0
2.	female	white	25-29	.	.	1
3.	female	white	30-34	.	.	1
4.	female	black	20-24	.	.	1
5.	female	black	25-29	.	.	1
6.	female	black	30-34	39399	14.2	0
7.	male	white	20-24	.	.	1
8.	male	white	25-29	32750	12.7	0
9.	male	white	30-34	.	.	1
10.	male	black	20-24	.	.	1
11.	male	black	25-29	.	.	1
12.	male	black	30-34	.	.	1

◀

## References

- Baum, C. F. 2016. *An Introduction to Stata Programming*. 2nd ed. College Station, TX: Stata Press.
- Cox, N. J. 2005. *Stata tip 17: Filling in the gaps*. *Stata Journal* 5: 135–136.

## Also see

- [D] **cross** — Form every pairwise combination of two datasets
- [D] **expand** — Duplicate observations
- [D] **frunalias** — Change storage type of alias variables
- [D] **joinby** — Form all pairwise combinations within groups
- [D] **save** — Save Stata dataset

Stata, Stata Press, and Mata are registered trademarks of StataCorp LLC. Stata and Stata Press are registered trademarks with the World Intellectual Property Organization of the United Nations. StataNow and NetCourseNow are trademarks of StataCorp LLC. Other brand and product names are registered trademarks or trademarks of their respective companies. Copyright © 1985–2023 StataCorp LLC, College Station, TX, USA. All rights reserved.



For suggested citations, see the FAQ on [citing Stata documentation](#).