

**recast** — Change storage type of variable

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## Description

`recast` changes the storage type of the variables identified in *varlist* to *type*.

## Quick start

Recast numeric variable `v1` to type `double` from any other numeric type

```
recast double v1
```

Recast string variable `v2` to `str30` from any length less than 30

```
recast str30 v2
```

As above, but for length longer than 30

```
recast str30 v2, force
```

## Syntax

```
recast type varlist [ , force ]
```

where *type* is `byte`, `int`, `long`, `float`, `double`, `str1`, `str2`, ..., `str2045`, or `strL`.

## Option

`force` makes `recast` unsafe by causing the variables to be given the new storage type even if that will cause a loss of precision, introduction of missing values, or, for string variables, the truncation of strings.

`force` should be used with caution. `force` is for those instances where you have a variable saved as a `double` but would now be satisfied to have the variable stored as a `float`, even though that would lead to a slight rounding of its values.

## Remarks and examples

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See [\[U\] 12 Data](#) for a description of storage types. Also see [\[D\] compress](#) and [\[D\] destring](#) for alternatives to `recast`.

## ▷ Example 1

`recast` refuses to change a variable's type if that change is inappropriate for the values actually stored, so it is always safe to try:

```
. use http://www.stata-press.com/data/r15/auto
(1978 Automobile Data)
. describe headroom
```

variable name	storage type	display format	value label	variable label
headroom	float	%6.1f		Headroom (in.)

```
. recast int headroom
headroom: 37 values would be changed; not changed
```

Our attempt to change `headroom` from a float to an int was ignored—if the change had been made, 37 values would have changed. Here is an example where the type can be changed:

```
. describe mpg
```

variable name	storage type	display format	value label	variable label
mpg	int	%8.0g		Mileage (mpg)

```
. recast byte mpg
. describe mpg
```

variable name	storage type	display format	value label	variable label
mpg	byte	%8.0g		Mileage (mpg)

`recast` works with string variables as well as numeric variables, and it provides all the same protections:

```
. describe make
```

variable name	storage type	display format	value label	variable label
make	str18	%-18s		Make and Model

```
. recast str16 make
make: 2 values would be changed; not changed
```

`recast` can be used both to promote and to demote variables:

```
. recast str20 make
. describe make
```

variable name	storage type	display format	value label	variable label
make	str20	%-20s		Make and Model

◀

**Also see**

[D] [compress](#) — Compress data in memory

[D] [dstring](#) — Convert string variables to numeric variables and vice versa

[U] [12.2.2 Numeric storage types](#)

[U] [12.4 Strings](#)