Title

recast — Change storage type of variable

Syntax Description Option Remarks and examples
Also see

Syntax

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

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

Description

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

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

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/r13/auto
(1978 Automobile Data)
. describe headroom

              storage   display    value
variable name   type    format     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

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

```
. recast byte mpg

. describe mpg

              storage   display    value
variable name   type    format     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

              storage   display    value
variable name   type    format     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

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

◁

Also see

[D] **compress** — Compress data in memory

[D] **destring** — Convert string variables to numeric variables and vice versa

[U] 12.2.2 Numeric storage types

[U] 12.4 Strings