quietly — Quietly and noisily perform Stata command

Description Syntax Remarks and examples Also see

# Description

quietly suppresses all terminal output for the duration of *command*. It is useful both interactively and in programs.

noisily turns back on terminal output, if appropriate, for the duration of *command*. It is useful only in programs.

set output specifies the output to be displayed. It is useful only in programs and even then is seldom used.

## Syntax

Perform command but suppress terminal output

quietly |: | command

Perform command and ensure terminal output

<u>n</u>oisily | : | command

Specify type of output to display

set output { proc | inform | error }

# **Remarks and examples**

Remarks are presented under the following headings:

quietly used interactively quietly used in programs Note for programmers

## quietly used interactively

#### Example 1

quietly is useful when you are using Stata interactively and want to temporarily suppress the terminal output. For instance, to estimate a regression of mpg on the variables weight, foreign, and headroom and to suppress the terminal output, type

. use https://www.stata-press.com/data/r18/auto
(1978 automobile data)
. quietly regress mpg weight foreign headroom
. \_

Admittedly, it is unlikely that you would ever want to do this in real life.

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## quietly used in programs

#### Technical note

quietly is often used in programs. Say that you have the following program to run a regression of y on x, calculate the residuals, and then list the outliers, which are defined as points with residuals below the 5th percentile or above the 95th percentile:

```
program myprog
    regress '1' '2'
    predict resid, resid
    sort resid
    summarize resid, detail
    list '1' '2' resid if resid< r(p5) | resid> r(p95)
    drop resid
end
```

Although the program will work, it will also fill the screen with the regression output, any notes that predict feels obligated to mention, and the detailed output from summarize. A better version of this program might read

```
program myprog
    quietly regress '1' '2'
    quietly predict resid, resid
    quietly sort resid
    quietly summarize resid, detail
    list '1' '2' resid if resid< r(p5) | resid> r(p95)
    drop resid
end
```

You can also combine quietly with { }:

```
program myprog
    quietly {
        regress '1' '2'
        predict resid, resid
        sort resid
        summarize resid, detail
    }
    list '1' '2' resid if resid< r(p5) | resid> r(p95)
        drop resid
end
```

#### □ Technical note

noisily is the antonym of quietly, and it too can be used in programs and do-files. In fact, that is its only real use. We could recode our example program to read as follows:

```
program myprog
    quietly {
        regress '1' '2'
        predict resid, resid
        sort resid
        summarize resid, detail
        noisily list '1' '2' resid if resid< r(p5) | resid> r(p95)
        drop resid
    }
end
```

Here we have not improved readability.

#### Technical note

noisily is not really the antonym of quietly. If the user types quietly myprog yvar xvar, the output will be suppressed because that is what the user wants. Here a noisily inside myprog will not display the output—noisily means noisily only if the program was allowed to be noisy when it was invoked.

#### Technical note

If you think you understand all this, take the following test. Is there any difference between quietly do *filename* and run *filename*? How about noisily run *filename* and do *filename*? What would happen if you typed quietly noisily summarize *myvar*? If you typed noisily quietly summarize *myvar*?

When you are ready, we will tell you the answers.

quietly do filename is equivalent to run filename. Typing run is easier, however.

noisily run *filename* is not at all the same as do *filename*. run produces no output, and no matter how noisily you run run, it is still quiet.

Typing quietly noisily summarize *myvar* is the same as typing summarize myvar. Think of it as quietly {noisily summarize *myvar*}. It is the inside noisily that takes precedence.

Typing noisily quietly summarize *myvar* is the same as typing quietly summarize *myvar*—it does nothing but burn computer time. Again it is the inside term, quietly this time, that takes precedence.

#### Technical note

set output proc means that all output, including procedure (command) output, is displayed. inform suppresses procedure output but displays informative messages and error messages. error suppresses all output except error messages. In practice, set output is seldom used.

#### Note for programmers

If you write a program or ado-file, say, mycmd, there is nothing special you need to do so that your command can be prefixed with quietly. That said, c-class value c(noisily) (see [P] creturn) will return 0 if output is being suppressed and 1 otherwise. Thus your program might read

```
program mycmd
...
display ...
display ...
...
end
```

```
program mycmd
    ...
    if c(noisily) {
        display ...
        display ...
     }
     ...
end
```

The first style is preferred. If the user executes quietly mycmd, the output from display itself, along with the output of all other commands, will be automatically suppressed.

If the program must work substantially to produce what is being displayed, however, and the only reason for doing that work is because of the display, then the second style is preferred. In such cases, you can include the extra work within the block of code executed only when c(noisily) is true and thus make your program execute more quickly when it is invoked quietly.

## Also see

or

- [P] capture Capture return code
- [U] 18 Programming Stata

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