NAME

ministat - statistics utility

SYNOPSIS

ministat [**-Anqs**] [**-C** *column*] [**-c** *confidence_level*] [**-d** *delimiter*] [**-w** [width]] [*file* ...]

DESCRIPTION

The **ministat** command calculates fundamental statistical properties of numeric data in the specified files or, if no file is specified, standard input.

The options are as follows:

-A Just report the statistics of the input and relative comparisons, suppress the ASCII-art plot.

-n Just report the raw statistics of the input, suppress the ASCII-art plot and the relative comparisons.

-q Suppress printing of summary statistics and data-set names; typically for use alongside **-n**.

-s Print the average/median/stddev bars on separate lines in the ASCII-art plot, to avoid overlap.

-C *column* Specify which column of data to use. By default the first column in the input file(s) are used.

-c *confidence_level*
Specify desired confidence level for Student's T analysis. Possible values are 80, 90, 95, 98, 99 and 99.5 %

-d *delimiter* Specifies the column delimiter characters, default is SPACE and TAB. See strtok(3) for details.

-w *width* Width of ASCII-art plot in characters. The default is the terminal width, or 74 if standard output is not a terminal.

A sample output could look like this:

```
$ ministat -s -w 60 iguana chameleon
x iguana
+ chameleon
```

```
+-------------------------------------------------------+
|x     * x         *     +           + x         +|
| |_______M_____A_______________|                   |
|         |_________________M__A___________________|    |
+-------------------------------------------------------+
   N       Min       Max    Median       Avg      Stddev
x  7        50       750       200       300   238.04761
+  5       150       930       500       540   299.08193
No difference proven at 95.0% confidence
```

If **ministat** tells you, as in the example above, that there is no difference proven at 95% confidence, the two data sets you gave it are for all statistical purposes identical.

You have the option of lowering your standards by specifying a lower confidence level:

```
$ ministat -s -w 60 -c 80 iguana chameleon
x iguana
+ chameleon
+-------------------------------------------------------+
|x     * x         *     +           + x         +|
| |_______M_____A_______________|                   |
|         |_________________M__A___________________|    |
+-------------------------------------------------------+
   N       Min       Max    Median       Avg      Stddev
x  7        50       750       200       300   238.04761
+  5       150       930       500       540   299.08193
Difference at 80.0% confidence
    240 +/- 212.215
    80% +/- 70.7384%
    (Student's t, pooled s = 264.159)
```

But a lower standard does not make your data any better, and the example is only included here to show the format of the output when a statistical difference is proven according to Student's T method.

SEE ALSO

Any mathematics text on basic statistics, for instances Larry Gonicks excellent "Cartoon Guide to Statistics" which supplied the above example.

HISTORY

The **ministat** command was written by Poul-Henning Kamp out of frustration over all the bogus

benchmark claims made by people with no understanding of the importance of uncertainty and statistics.

From FreeBSD 5.2 it has lived in the source tree as a developer tool, graduating to the installed system from FreeBSD 8.0.