

## bc (command line calculator)

Why use a restricted graphical calculator when you have an arbitrary precision calculator *language* on the command line? Fire it up by typing *bc*. This will give you a new command prompt where you can enter arithmetic expressions much like you're used to, e.g.  $1+2$  or  $3*7$ . If you need the result of the last expression calculated, use the keyword *last*, for example:

```
1+2
3
last+7
10
```

You entered  $1+2$  and *bc* gave you the result 3. Then you added 7 to this intermediate result by typing *last+7*.

*bc* displays only one or two decimal places by default when doing floating point arithmetic. You can change this like so:

```
scale=4
```

This will make *bc* print up to 4 decimal places. Since *bc* is an arbitrary precision calculator language, the scale can be as large as 2147483647! You can save your favorite scale value by adding the following line to your `~/.bashrc` configuration file:

```
export BC_ENV_ARGS="$HOME/.bc_settings"
```

In the file `~/.bc_settings` (you can use any other file name), save your desired scale value, for example:

```
scale=8
```

Every time *bc* starts, it evaluates the file given by `BC_ENV_ARGS`.