

NAME

monitor — prepare execution profile

SYNOPSIS

```
monitor (lowpc, highpc, buffer, bufsize, nfunc)
int (*lowpc)(), (*highpc)();
short buffer[];
int bufsize, nfunc;
```

DESCRIPTION

An executable program created by `cc -p` automatically includes calls for *monitor* with default parameters; *monitor* needn't be called explicitly except to gain fine control over profiling.

Monitor is an interface to *profil(2)*. *Lowpc* and *highpc* are the addresses of two functions; *buffer* is the address of a (user supplied) array of *bufsize* short integers. *Monitor* arranges to record a histogram of periodically sampled values of the program counter, and of counts of calls of certain functions, in the buffer. The lowest address sampled is that of *lowpc* and the highest is just below *highpc*. At most *nfunc* call counts can be kept; only calls of functions compiled with the profiling option `-p` of *cc(1)* are recorded. For the results to be significant, especially where there are small, heavily used routines, it is suggested that the buffer be no more than a few times smaller than the range of locations sampled.

To profile the entire program, it is sufficient to use

```
extern etext();
...
monitor(2, etext, buf, bufsize, nfunc);
```

Etect lies just above all the program text, see *end(3C)*.

To stop execution monitoring and write the results on the file *mon.out*, use

```
monitor(0);
```

then *prof(1)* can be used to examine the results.

FILES

mon.out

SEE ALSO

prof(1), *profil(2)*, *cc(1)*