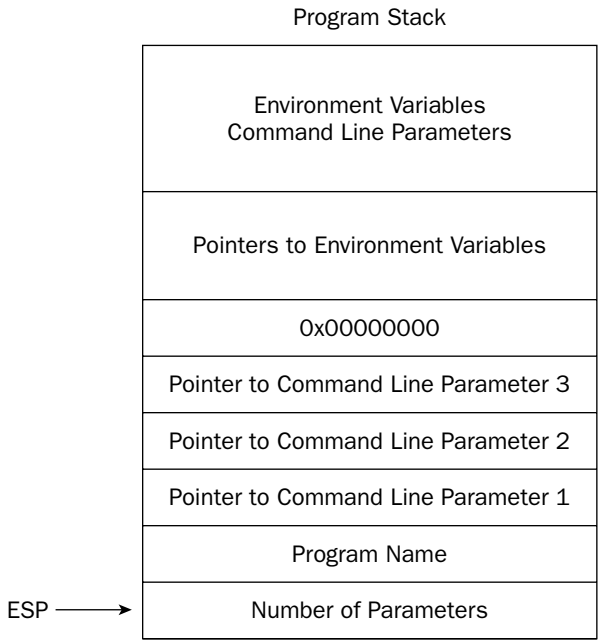

Figure 11-8

You can use the debugger to see how this works. Run the `functest4` program (presented earlier in the section "Creating a separate function file") in the debugger, and watch the stack when the program starts. First, start the program, and give it a command-line parameter (this is done in the run command in the debugger):

```
$ gdb -q functest4
(gdb) break *_start+1
Breakpoint 1 at 0x8048075: file functest4.s, line 11.
(gdb) run 10
Starting program: /home/rich/palp/chap11/functest4 10

Breakpoint 1, _start () at functest4.s:11
11          finit
Current language:  auto; currently asm
(gdb) print $esp
$1 = (void *) 0xbffff950
(gdb)
```

Notice that the `Starting program` line indicates the command-line parameter specified in the run command. The ESP pointer shows that it is pointing to memory location `0xbffff950`. This indicates the top of the stack. You can view the values there using the `x` command:

```
(gdb) x/20x 0xbffff950
0xbffff950:  0x00000002   0xbffffa36   0xbffffa57   0x00000000
0xbffff960:  0xbffffa5a   0xbffffa75   0xbffffa95   0xbffffaa7
0xbffff970:  0xbffffabf   0xbffffadf   0xbffffaf2   0xbffffb14
```