```
1: // $Id: showlink.c,v 1.3 2013-05-17 17:56:07-07 - - $
 2:
 3: //
 4: // Example of how to display a symbolic link. This program is *NOT*
 5: // called readlink, because one such already exists on Linux.
 6: // Print a symlink or an error message. PATH_MAX is the max length
 7: // of a pathname.
 8: //
 9: // From man -s 2 readlink:
10: //
11: //
          DESCRIPTION
12: //
              readlink() places the contents of the symbolic link path
13: //
              in the buffer buf, which has size bufsiz. readlink()
              does not append a null byte to buf. It will truncate the
14: //
15: //
              contents (to a length of bufsiz characters), in case the
16: //
              buffer is too small to hold all of the contents.
17: //
18: // This looks like a bizarre design bug.
19: //
20:
21: #include <errno.h>
22: #include <libgen.h>
23: #include <limits.h>
24: #include <stdio.h>
25: #include <stdlib.h>
26: #include <string.h>
27: #include <unistd.h>
28:
29: int main (int argc, char **argv) {
30:
       int exit_status = EXIT_SUCCESS;
31:
       for (int argi = 1; argi < argc; ++argi) {</pre>
32:
          char *pathname = argv[argi];
33:
          char linkname[PATH_MAX + 1];
34:
          ssize_t retval = readlink (pathname, linkname, sizeof linkname);
35:
          if (retval >= 0) {
36:
             linkname[retval < PATH_MAX + 1 ? retval : PATH_MAX] = '\0';</pre>
37:
             printf ("%s -> \"%s\"\n", pathname, linkname);
          }else {
38:
             exit_status = EXIT_FAILURE;
39:
             fflush (NULL);
40:
41:
             fprintf (stderr, "%s: %s: %s\n",
42:
                      basename (argv[0]), pathname, strerror (errno));
43:
             fflush (NULL);
44:
          }
45:
       }
46:
       return exit_status;
47: }
48:
49: //TEST// ./showlink *.c *sym* >showlink.lis 2>&1
50: //TEST// mkpspdf showlink.ps showlink.c* showlink.lis
51:
```

\$\cmps012b\-wm/Labs\-cmps012m/lab8c\-unixprog\-stat/testdata/\
showlink.c.log

1/1

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## \$cmps012b-wm/Labs-cmps012m/lab8c-unixprog-stat/testdata/showlink.lis

1/1

```
1: showlink: futuretimes.c: Invalid argument
2: showlink: mktimestamp.c: Invalid argument
3: showlink: now.c: Invalid argument
```

4: showlink: showlink.c: Invalid argument
5: showlink: strftime.c: Invalid argument
6: this-is-a-symlink -> "mstat.perl"