

```
1: // $Id: catfile.cpp,v 1.1 2016-06-28 14:47:18-07 - - $
2:
3: //
4: // NAME
5: //     catfile - display files to stdout
6: //
7: // SYNOPSIS
8: //     catfile [filename...]
9: //
10: // DESCRIPTION
11: //     Display contents of files given on the command line.  If no
12: //     files are specified, display stdin.  Interpret "-" as the
13: //     name of stdin.
14: //
15:
16: #include <cstring>
17: #include <fstream>
18: #include <iostream>
19: #include <string>
20: #include <vector>
21: using namespace std;
22:
23: #include <libgen.h>
24:
25: const string cin_name = "-";
26:
27: void catfile (istream& infile, const string& filename) {
28:     static string colons (32, ':');
29:     cout << colons << endl << filename << endl << colons << endl;
30:     for(;;) {
31:         string line;
32:         getline (infile, line);
33:         if (infile.eof()) break;
34:         cout << line << endl;
35:     }
36: }
37:
```

```
38:
39: int main (int argc, char** argv) {
40:     int status = 0;
41:     string progname (basename (argv[0]));
42:     vector<string> filenames (&argv[1], &argv[argc]);
43:     if (filenames.size() == 0) filenames.push_back (cin_name);
44:     for (const auto& filename: filenames) {
45:         if (filename == cin_name) catfile (cin, filename);
46:         else {
47:             ifstream infile (filename);
48:             if (infile.fail()) {
49:                 status = 1;
50:                 cerr << progname << ": " << filename << ": "
51:                     << strerror (errno) << endl;
52:             }else {
53:                 catfile (infile, filename);
54:                 infile.close();
55:             }
56:         }
57:     }
58:     return status;
59: }
60:
61: //TEST// date >date.out
62: //TEST// ls -bgoa date* catfile* | catfile - date.out >catfile.out
63: //TEST// rm date.out
64: //TEST// mkpspdf catfile.ps catfile.cpp* catfile.out
65:
```


