```
1: // $Id: showhost.cpp,v 1.4 2014-05-20 19:51:15-07 - - $
 3: #include <iostream>
 4: #include <string>
 5: #include <vector>
 6: using namespace std;
7:
 8: #include <arpa/inet.h>
 9: #include <errno.h>
10: #include <netdb.h>
11: #include <netinet/in.h>
12: #include <sys/socket.h>
13: #include <sys/types.h>
14:
15: int main (int argc, char** argv) {
       string progname (argv[0]);
17:
       vector<string> args (&argv[1], &argv[argc]);
18:
19:
       for (const string& hostname: args) {
20:
          if (args.size() > 1) cout << endl;</pre>
21:
          hostent* host = gethostbyname (hostname.c_str());
22:
          if (host == nullptr) {
23:
             cout << hostname << ": " << hstrerror (h_errno) << endl;</pre>
24:
          }else {
25:
             cout << "Hostname: " << hostname << endl;</pre>
26:
             cout << "h_name:</pre>
                                 " << host->h_name << endl;
             for (char** alias = host->h_aliases; *alias; ++alias) {
27:
28:
                cout << "h_alias:</pre>
                                    " << *alias << endl;
29:
             }
30:
             for (in_addr** addr_list = (in_addr**) host->h_addr_list;
31:
                   *addr_list; ++addr_list) {
                cout << "h_addr: " << inet_ntoa (**addr_list) << endl;</pre>
32:
33:
             }
34:
          }
35:
       }
36:
37:
       return 0;
38: }
39:
40: /*
41: //TEST// showhost www.soe.ucsc.edu soe.ucsc.edu \
42: //TEST//
                     www.ucsc.edu unix.ucsc.edu \
43: //TEST//
                      unix1.lt.ucsc.edu unix2.lt.ucsc.edu \
                     www.google.com www.nohost.zone >showhost.output
44: //TEST//
45: //TEST// mkpspdf showhost.ps showhost.cpp* showhost.output
46: */
47:
```

07/07/16 18:13:41

\$cmps109-wm/Examples/wk08a-sockets/small-examples/showhost.cpp.log

1/1

34:

```
1:
 2: Hostname:
               www.soe.ucsc.edu
 3: h name:
               www-01.soe.ucsc.edu
 4: h_alias:
               www.soe.ucsc.edu
 5: h_addr:
               128.114.50.76
 6:
 7: Hostname:
               soe.ucsc.edu
 8: h_name:
               soe.ucsc.edu
 9: h_addr:
               128.114.48.104
10:
11: Hostname:
               www.ucsc.edu
12: h_name:
               wcms-ucsc.aws-wcms.ucsc.edu
13: h_alias:
               www.ucsc.edu
14: h_addr:
               128.114.109.5
15:
16: Hostname:
               unix.ucsc.edu
17: h_name:
               unix.lt.ucsc.edu
18: h_alias:
               unix.ucsc.edu
19: h_addr:
20: h_addr:
21: h_addr:
               128.114.104.55
               128.114.104.56
               128.114.104.57
22:
23: Hostname:
               unix1.lt.ucsc.edu
               unix1.lt.ucsc.edu
24: h_name:
25: h_addr:
               128.114.104.55
26:
27: Hostname:
               unix2.lt.ucsc.edu
28: h_name:
               unix2.lt.ucsc.edu
29: h_addr:
               128.114.104.56
30:
31: Hostname:
               www.google.com
32: h_name:
               www.google.com
33: h_addr:
               216.58.193.196
```

35: www.nohost.zone: Unknown host