

```
1: // $Id: stoi.cpp,v 1.15 2014-04-09 15:28:50-07 - - $
2:
3: //
4: // NAME
5: //     stoi - print out argv elements that are ints
6: //
7: // SYNOPSIS
8: //     stoi [string...]
9: //
10: // DESCRIPTION
11: //     Prints out its arguments that are ints, and which are not.
12: //
13:
14: #include <iostream>
15: #include <sstream>
16: #include <stdexcept>
17: #include <string>
18: #include <vector>
19: using namespace std;
20:
21: int main (int argc, char **argv) {
22:     cout << boolalpha;
23:     for (const auto& arg: vector<string> (&argv[1], &argv[argc])) {
24:         cout << "\"" << arg << "\": ";
25:         try {
26:             size_t endpos;
27:             int number = stoi (arg, &endpos);
28:             if (endpos == arg.size()) {
29:                 cout << "good number = " << number << endl;
30:             }else {
31:                 cout << "bad number = " << number << ", trailing junk = \""
32:                     << arg.substr (endpos) << "\"" << endl;
33:             }
34:         }catch (invalid_argument &error) {
35:             cout << "invalid_argument (" << error.what() << ")" << endl;
36:         }catch (out_of_range &error) {
37:             cout << "out_of_range (" << error.what() << ")" << endl;
38:         }
39:     }
40: }
41:
42: /*
43: //TEST// ./stoi 1024 56foobar -45 68.9 testing 007777 0x48 \
44: //TEST//      2147483648 >stoi.lis
45: //TEST// mkpspdf stoi.ps stoi.cpp* stoi.lis
46: */
47:
```

[illegible]

```
1: "1024": good number = 1024
2: "56foobar": bad number = 56, trailing junk = "foobar"
3: "-45": good number = -45
4: "68.9": bad number = 68, trailing junk = ".9"
5: "testing": invalid_argument (stoi)
6: "007777": good number = 7777
7: "0x48": bad number = 0, trailing junk = "x48"
8: "2147483648": out_of_range (stoi)
```