

```cpp
    { 
      cout << "Out of range -- please try again: ";
      cin >> num;
    }

    int val = num;
    cout << "You've entered the integer " << val << "\nBye\n";
    return 0;
}

bool is_int(double x) 
{ 
  if (x <= INT_MAX && x >= INT_MIN)   // use climits values 
    return true;
  else 
    return false;
}

Compatibility Note

If your system doesn't provide climits, use limits.h.

Here is a sample run on a system with a 32-bit int:

Yo, dude! Enter an integer value: 6234128679
Out of range -- please try again: -8000222333
Out of range -- please try again: 99999
You've entered the integer 99999
Bye

Program Notes

If you enter a too-large value to a program reading a type int, many implementations simply truncate the value to fit without informing you that data was lost. This program avoids that by first reading the potential int as a double. The double type has more than
```