**Write any program that demonstrates the use of multiple catch handling, re-throwing an exception, and catching all exception.**

**#include <iostream>**

**#define SUCCESS 0**

**using namespace std;**

**class DIVZERO{};**

**class DIVMINUS{};**

**int main()**

**{**

**int a, b;**

**float ans;**

**try {**

**cout << "a";**

**cin >> a;**

**cout << "b";**

**cin >> b;**

**try {**

**if(b < 0)**

**throw DIVMINUS();**

**if(b == 0)**

**throw DIVZERO();**

**ans = a/b;**

**}**

**catch (DIVZERO)**

**{**

**cerr << "rethrowing DIVZERO exception" << endl;**

**throw;**

**}**

**catch (DIVMINUS)**

**{**

**cerr << "divison by minus in not allowed"<< endl;**

**}**

**} catch (...) {**

**cerr << "caught exception";**

**}**

**cout << ans;**

**return SUCCESS;**

**}**

**#include<iostream>//or**

**using namespace std;**

**class Check**

**{**

**int x;**

**public:**

**Check()**

**{**

**cout<<"Enter a number between 0 and 100: ";**

**cin>>x;**

**}**

**class Smaller{};**

**class Larger{};**

**void check()**

**{**

**try**

**{**

**if(x<0)**

**{**

**throw Smaller();**

**}**

**if(x>100)**

**{**

**throw Larger();**

**}**

**}**

**catch(Larger)**

**{**

**cout<<"Rethrowing greater exception"<<endl;**

**throw;**

**}**

**}**

**};**

**int main()**

**{**

**Check obj;**

**try**

**{**

**obj.check();**

**cout<<"The number is valid"<<endl;**

**}**

**catch(Check::Smaller)**

**{**

**cout<<"The number is less than 0"<<endl;**

**}**

**catch(Check::Larger)**

**{**

**cout<<"The number is greater than 100"<<endl;**

**}**

**return 0;**

**}**