#include <iostream>

using namespace std;

class IllegalSubscriptException : public runtime\_error {

public:

IllegalSubscriptException(int i) : runtime\_error("Subscript out of range") {

this -> i = i;

}

char getChar() {

return i;

}

private:

int i;

};

class Rational {

public:

int &operator[](int index) {

if (index == 0) {

return numerator;

} else if (index == 1) {

return denominator;

} else {

throw IllegalSubscriptException(index);

}

}

private:

int numerator, denominator;

};

int main() {

Rational R;

try {

for (int i = 0; i < 3; i++) {

R[i] = i;

cout << "R[" << i << "] is " << R[i] << endl;

}

} catch (runtime\_error e) {

cout << e.what();

}

return 0;

}

#include <iostream>

using namespace std;

int gcd(int m, int n) {

if (m % n == 0) {

return n;

} else {

return gcd(n,m%n);

}

}

int main() {

int m, n;

cout << "Please provide the first number: ";

cin >> m;

cout << "Please provide the second number: ";

cin >> n;

cout << "GCD for the first and second number is: " << gcd(m, n) << endl;

}