1.雷劈数

#include <iostream>

using namespace std;

int main()

{

for (int i = 9; i < 10000; ++i) {

int x = i\*i;

int y = 10;

int a = x / y;

int b = x % y;

while (a > 0&& b>0) {

if ((a + b)==i) {

cout << "[" << a << "," << b << "]>>" << x << endl;

break;

}

y \*= 10;

a = x / y;

b = x % y;

}

}

    return 0;

}

2.（1）

#include <iostream>

using namespace std;

int main()

{

int n;

cout << "Please enter the square size:";

cin >> n;

int\*\* a = new int\*[n];

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

a[i] = new int[n];

for (int j = 0; j < n; ++j)

cin >> a[i][j];

}

int sum = 0;

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

sum += a[i][i];

}

int sum1 = 0;

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

sum1 += a[i][n - 1 - i];

}

if (sum1 != sum) {

cout << "It's not a magic square." << endl;

return 0;

}

else {

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

sum1 = 0;

for (int j = 0; j < n; ++j) {

sum1 += a[i][j];

}

if (sum1 != sum) {

cout << "It's not a magic square." << endl;

return 0;

}

}

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

sum1 = 0;

for (int j = 0; j < n; ++j) {

sum1 += a[j][i];

}

if (sum1 != sum) {

cout << "It's not a magic square." << endl;

return 0;

}

}

}

cout << "It's a magic square." << endl;

    return 0;

}

（2）

#include <iostream>

#include <iomanip>

using namespace std;

int main()

{

cout << "Please enter an odd number size:";

int n;

cin >> n;

int\*\* a = new int\*[n];

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

a[i] = new int[n];

for (int j = 0; j < n; ++j)

a[i][j] = 0;

}

int i = 0;

int j = n / 2;

for (int k = 1; k <= n\*n; ++k) {

a[i][j] = k;

if (k == n\*n)

break;

int x = i;

int y = j;

--i;

++j;

if (i < 0)

i = n-1;

if (i >= n)

i = 0;

if (j < 0)

j = n - 1;

if (j >= n)

j = 0;

if (a[i][j] != 0) {

i = x + 1;

j = y;

if (i < 0)

i = n - 1;

if (i >= n)

i = 0;

if (j < 0)

j = n - 1;

if (j >= n)

j = 0;

}

}

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

for (int j = 0; j < n; ++j)

cout <<setw(5)<< a[i][j];

cout << endl;

}

    return 0;

}