八皇后问题

代码：

#include <iostream>

#include <vector>

using namespace std;

int available(vector<int>,int);

int play(vector<int>&);

int main()

{

vector<int> queen;

cout << play(queen) << endl;

}

int play(vector<int> &v)

{

int sum = 0;

for (int i = 0; i < 8; i++) {

if (available(v, i) && v.size() < 7) {

v.push\_back(i);

sum += play(v);

v.pop\_back();

}

if (available(v, i) && v.size() == 7) sum += 1;

}

return sum;

}

int available(vector<int> v,int k)

{

int pos = v.size();

for (int i = 0; i < v.size(); i++)

if (v[i] == k || (v[i] + i) == (k + pos) || (i - v[i]) == (pos - k)) return 0;

return 1;

}

运行结果：

