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/*--- hw29.cpp ---*/
#include <iostream>
#include <string>

using namespace std;

struct contestant
{
    string name;
    int* tickets;
};

void search(contestant*, int, int);
void print(contestant*, int);

int main()
{
    int n;
    cout << "How many people? ";
    cin >> n;

    contestant* A = new contestant[n];

    for(int i = 0; i < n; i++)
    {
        A[i].tickets = new int[4];
    }

    for(int i = 0; i < n; i++)
    {
        cout << "Person " << i+1 << " name: ";
        cin >> A[i].name;
        cout << "Person " << i+1 << " tickets: ";
        cin >> A[i].tickets[0] >> A[i].tickets[1] >> A[i].tickets[2] >> A[i].tickets[3]
    }

    int winticket;
    cout << "Winning ticket: ";
    cin >> winticket;

    search(A, n, winticket);

    return 0;
}

void search(contestant* A, int n, int wt)
{
    for(int i = 0; i < n; i++)
    {
        for(int j = 0; j < 4; j++)
        {
            if(A[i].tickets[j] == wt)
            {
                print(A,i);
                break;
            }
        }
    }
}

void print(contestant* A, int i)
{
    cout << A[i].name << " won!" << endl;
}
```