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// Fisierul Ball.h
#ifndef BALL_H
#define BALL_H

namespace LBall {

    class LottoBall {
        int nr;
        bool extracted;
    public:
        LottoBall(void);
        LottoBall(int k) { nr = k; extracted = false; }
        int GetNr(void) const { return nr; }
        bool HasBeenExtracted(void) const { return extracted; }
        void SetExtracted(void) { extracted = true; }
        void ResetExtracted(void) { extracted = false; }
        void PrintExtracted(void) const;
        void PrintAll(void) const;
    };

#define NR_BALLS          49
#define MAX_EXTRACTED 6

    class LottoMachine {
        LottoBall balls[NR_BALLS];
        int extractedBalls[MAX_EXTRACTED];
        int currentExtracted;
    public:
        LottoMachine(void) { currentExtracted = 0; }
        int ExtractNr(void);
        void Init(void);
        void Session(void);
        void Print(void) const;
    };

}

#endif

// Fisierul Ball.cpp
#include "Ball.h"
#include <stdlib.h>
#include <time.h>
#include <iostream>

using namespace std;
using namespace LBall;

namespace {
    static int max_nr = 0;
}

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LottoBall::LottoBall(void) {
    nr = ++max_nr;
    extracted = false;
}

void LottoBall::PrintExtracted(void) const {
    if (extracted)
        cout << nr << endl;
}

void LottoBall::PrintAll(void) const {
    cout << nr << endl;
}

int GetRandomNr(void) {
    int k;
    k = rand();
    return (49 * k) / RAND_MAX;
}

void LottoMachine::Init(void) {
    for (int i=0; i<NR_BALLS; i++)
        balls[i].ResetExtracted();
}

int LottoMachine::ExtractNr(void) {
    int k;
    bool finish;
    do {
        int i;
        finish = true;
        k = GetRandomNr();
        for (i=0; i<currentExtracted; i++) {
            if (extractedBalls[i] == k) {
                finish = false;
                break;
            }
        }
    } while (!finish);
    extractedBalls[currentExtracted++] = k;
    return k;
}

void LottoMachine::Session(void) {
    srand((unsigned)time(NULL));
    cout << "Incepe extragerea" << endl;
    Init();
    for (int i=0; i<MAX_EXTRACTED; i++) {
        int k;
        k = ExtractNr();
        for (int j=0; j<NR_BALLS; j++) {
            if (balls[j].GetNr() == k) {

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        balls[j].SetExtracted();
        break;
    }
}
}

void LottoMachine::Print(void) const {
    cout << "S-au extras numerele:" << endl;
    for (int i=0; i<49; i++)
        balls[i].PrintExtracted();
    cout << endl;
}

// Fisierul TestLoto.cpp
#include "Ball.h"
#include <iostream>

using namespace std;
using namespace LBall;

void main( void) {
    LottoMachine lotto;
    lotto.Session();
    lotto.Print();
    lotto.Session();
    lotto.Print();
}

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