

Project 2: Wedding Bells Are Ringing... Testing

There were 100 test cases. Each test was worth 1.3 points each; to run the test cases:

1. Remove the main routine from your `BirthdayParty.cpp` file.
2. Append the following text to the end of your `BirthdayParty.cpp` file and build the resulting program.
3. For any test case you wish to try, run the program, providing as input the test number.

```
#include <iostream>
#include <cstdlib>
#include <string>
#include <cassert>
#include <vector>
#include <type_traits>
#include "OnlineDating.h"

using namespace std;

bool lookAtMatches3type(bool (OnlineDating::*)(const
std::string&, const std::string&, OnlineType&) const) { return
true; }
bool lookAtMatches3type(bool (OnlineDating::*)(const
std::string&, const std::string&, OnlineType&)) { return false;
}
bool lookAtMatches3type(...) { return false; }
bool confirmMatch4type(bool (OnlineDating::*)(int, std::string&,
std::string&, OnlineType&) const) { return true; }
bool confirmMatch4type(bool (OnlineDating::*)(int, std::string&,
std::string&, OnlineType&)) { return false; }
bool confirmMatch4type(...) { return false; }

std::string SOMEFNAME = std::string("123");
std::string DEFAULTFNAME = std::string();
std::string ARRAYFNAME[6] = {
    std::string("10"), std::string("20"), std::string("30"),
    std::string("40"), std::string("50"), std::string("60")
};

std::string SOMELENAME = std::string("321");
std::string DEFAULTLENAME = std::string();
std::string ARRAYLENAME[6] = {
    std::string("11"), std::string("21"), std::string("31"),
    std::string("41"), std::string("51"), std::string("61")
};
```

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OnlineType SOMEVALUE = "junk";
OnlineType DEFAULTV = OnlineType();
OnlineType ARRAYV[6] = {
    "able", "baker", "charlie", "delta", "echo", "foxtrot"
};

bool has(const OnlineDating& m, const std::string& firstName,
const std::string& lastName, const OnlineType& v)
{
    OnlineType v2 = DEFAULTV;
    m.lookAtMatches(firstName, lastName, v2);
    OnlineType v3 = SOMEVALUE;
    m.lookAtMatches(firstName, lastName, v3);
    return v2 == v && v3 == v;
}

void testone(int n)
{
    OnlineDating m;
    switch (n)
    {
    default: {
        cout << "Bad argument" << endl;
    } break; case 1: {
        assert((is_same<decltype(&OnlineDating::noMatches),
bool (OnlineDating::*)(const std::string& const std::string&
const std::string&) const>::value));
    } break; case 2: {

        assert((is_same<decltype(&OnlineDating::howManyMatches),
int (OnlineDating::*)(const std::string& const std::string&
const std::string&) const>::value));
    } break; case 3: {

        assert((is_same<decltype(&OnlineDating::someoneAmongMatche
s), bool (OnlineDating::*)(const std::string, const std::string)
const std::string& const std::string&) const>::value));
    } break; case 4: {

        assert((is_same<decltype(&OnlineDating::someoneAmongMatche
s), bool (OnlineDating::*)(const std::string& const std::string&
const std::string&) const>::value));
    } break; case 5: {

        assert(lookAtMatches3type(&OnlineDating::lookAtMatches));
    } break; case 6: {

        assert(confirmMatch4type(&OnlineDating::confirmMatch));
    } break; case 7: {

        assert(m.noMatches());
    } break;
    }
}

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    } break; case 7: {
        assert(m.howManyMatches() == 0);
    } break; case 8: {
        assert(!m.transformMatch(DEFAULTFNAME, DEFAULTLNAME,
SOMEVALUE) && m.howManyMatches() == 0);
    } break; case 9: {
        assert(!m.blockPreviousMatch(DEFAULTFNAME,
DEFAULTLNAME) && m.howManyMatches() == 0);
    } break; case 10: {
        assert(!m.someoneAmongMatches(DEFAULTFNAME,
DEFAULTLNAME));
    } break; case 11: {
        OnlineType v = SOMEVALUE;
        assert(!m.lookAtMatches(DEFAULTFNAME, DEFAULTLNAME,
v) && v == SOMEVALUE);
    } break; case 12: {
        OnlineType v = SOMEVALUE;
        assert(!m.confirmMatch(0, DEFAULTFNAME,
DEFAULTLNAME, v) && v == SOMEVALUE);
    } break; case 13: {
        assert(m.makeMatch(SOMEFNAME, SOMELNAME,
SOMEVALUE));
    } break; case 14: {
        m.makeMatch(SOMEFNAME, SOMELNAME, SOMEVALUE);
        assert(!m.noMatches());
    } break; case 15: {
        m.makeMatch(SOMEFNAME, SOMELNAME, SOMEVALUE);
        assert(m.howManyMatches() == 1);
    } break; case 16: {
        m.makeMatch(SOMEFNAME, SOMELNAME, SOMEVALUE);
        assert(m.someoneAmongMatches(SOMEFNAME, SOMELNAME));
    } break; case 17: {
        m.makeMatch(SOMEFNAME, SOMELNAME, SOMEVALUE);
        OnlineType v = DEFAULTV;
        assert(m.lookAtMatches(SOMEFNAME, SOMELNAME, v));
    } break; case 18: {
        m.makeMatch(SOMEFNAME, SOMELNAME, SOMEVALUE);
        OnlineType v = DEFAULTV;
        m.lookAtMatches(SOMEFNAME, SOMELNAME, v);
        assert(v == SOMEVALUE);
    } break; case 19: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
SOMEVALUE);
        OnlineType v = DEFAULTV;
        assert(!m.lookAtMatches(ARRAYFNAME[1],
ARRAYLNAME[1], v));
    } break; case 20: {

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        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        OnlineType v = SOMEVALUE;
        m.lookAtMatches(ARRAYFNAME[1], ARRAYLNAME[1], v);
        assert(v == SOMEVALUE);
    } break; case 21: {
        m.makeMatch(SOMEFNAME, SOMEENAME, SOMEVALUE);
        std::string f = DEFAULTFNAME;
        std::string l = DEFAULTLNAME;
        OnlineType v = DEFAULTV;
        assert(m.confirmMatch(0, f, l, v));
    } break; case 22: {
        m.makeMatch(SOMEFNAME, SOMEENAME, SOMEVALUE);
        std::string f = DEFAULTFNAME;
        std::string l = DEFAULTLNAME;
        OnlineType v = DEFAULTV;
        m.confirmMatch(0, f, l, v);
        assert(f == SOMEFNAME && l == SOMEENAME && v ==
SOMEVALUE);
    } break; case 23: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        assert(!m.noMatches() && m.howManyMatches() == 2);
    } break; case 24: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        assert(m.someoneAmongMatches(ARRAYFNAME[0],
ARRAYLNAME[0]) && m.someoneAmongMatches(ARRAYFNAME[1],
ARRAYLNAME[1]));
    } break; case 25: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        assert(has(m, ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]) && has(m, ARRAYFNAME[1], ARRAYLNAME[1], ARRAYV[1]));
    } break; case 26: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
SOMEVALUE);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
SOMEVALUE);
        assert(has(m, ARRAYFNAME[0], ARRAYLNAME[0],
SOMEVALUE) && has(m, ARRAYFNAME[1], ARRAYLNAME[1], SOMEVALUE));

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        } break; case 27: {
            assert(m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]));
            assert(m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]));
        } break; case 28: {
            m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[2]);
            assert(m.howManyMatches() == 2);
        } break; case 29: {
            m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[2]);
            assert(has(m, ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]) && has(m, ARRAYFNAME[1], ARRAYLNAME[1], ARRAYV[1]));
        } break; case 30: {
            assert(m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]));
            assert(m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]));
            assert(!m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[2]));
        } break; case 31: {
            assert(m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]));
            assert(m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]));
            assert(!m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]));
        } break; case 32: {
            m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            m.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
            m.transformMatch(ARRAYFNAME[1], ARRAYLNAME[1],
SOMEVALUE);
            assert(m.howManyMatches() == 3 &&
m.someoneAmongMatches(ARRAYFNAME[0], ARRAYLNAME[0]) &&

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        m.someoneAmongMatches (ARRAYFNAME[1],
ARRAYLNAME[1]) && m.someoneAmongMatches (ARRAYFNAME[2],
ARRAYLNAME[2]));
    } break; case 33: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        m.transformMatch (ARRAYFNAME[1], ARRAYLNAME[1],
SOMEVALUE);
        assert (has (m, ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]) && has (m, ARRAYFNAME[1], ARRAYLNAME[1], SOMEVALUE) &&
            has (m, ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]));
    } break; case 34: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        assert (m.transformMatch (ARRAYFNAME[1],
ARRAYLNAME[1], SOMEVALUE));
    } break; case 35: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.transformMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[0]);
        assert (m.howManyMatches () == 2 && has (m,
ARRAYFNAME[0], ARRAYLNAME[0], ARRAYV[0]) &&
            has (m, ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]) && !m.someoneAmongMatches (ARRAYFNAME[2],
ARRAYLNAME[2]));
    } break; case 36: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        assert (!m.transformMatch (ARRAYFNAME[2],
ARRAYLNAME[2], ARRAYV[2]) && !m.transformMatch (ARRAYFNAME[3],
ARRAYLNAME[3], ARRAYV[0]));
    } break; case 37: {

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        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeOrTransform (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        assert (!m.noMatches() && m.howManyMatches() == 2);
    } break; case 38: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeOrTransform (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        assert (has (m, ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]) && has (m, ARRAYFNAME[1], ARRAYLNAME[1], ARRAYV[1]));
    } break; case 39: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
SOMEVALUE);
        m.makeOrTransform (ARRAYFNAME[1], ARRAYLNAME[1],
SOMEVALUE);
        assert (has (m, ARRAYFNAME[0], ARRAYLNAME[0],
SOMEVALUE) && has (m, ARRAYFNAME[1], ARRAYLNAME[1], SOMEVALUE));
    } break; case 40: {
        assert (m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]));
        assert (m.makeOrTransform (ARRAYFNAME[1],
ARRAYLNAME[1], ARRAYV[1]));
    } break; case 41: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeOrTransform (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[2]);
        assert (m.howManyMatches() == 2 && has (m,
ARRAYFNAME[0], ARRAYLNAME[0], ARRAYV[2]) &&
                has (m, ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]));
    } break; case 42: {
        assert (m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]));
        assert (m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]));
        assert (m.makeOrTransform (ARRAYFNAME[0],
ARRAYLNAME[0], ARRAYV[2]));
    } break; case 43: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);

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        m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        m.makeOrTransform (ARRAYFNAME[1], ARRAYLNAME[1],
SOMEVALUE);
        assert (m.howManyMatches() == 3 && has (m,
ARRAYFNAME[0], ARRAYLNAME[0], ARRAYV[0]) &&
                has (m, ARRAYFNAME[1], ARRAYLNAME[1],
SOMEVALUE) && has (m, ARRAYFNAME[2], ARRAYLNAME[2], ARRAYV[2]));
        } break; case 44: {
            m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
            assert (m.makeOrTransform (ARRAYFNAME[1],
ARRAYLNAME[1], SOMEVALUE));
        } break; case 45: {
            m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            m.makeOrTransform (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[0]);
            assert (m.howManyMatches() == 3 && has (m,
ARRAYFNAME[0], ARRAYLNAME[0], ARRAYV[0]) &&
                has (m, ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]) && has (m, ARRAYFNAME[2], ARRAYLNAME[2], ARRAYV[0]));
        } break; case 46: {
            m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            assert (m.makeOrTransform (ARRAYFNAME[2],
ARRAYLNAME[2], ARRAYV[2]));
        } break; case 47: {
            m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            assert (m.blockPreviousMatch (ARRAYFNAME[1],
ARRAYLNAME[1]));
        } break; case 48: {
            m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);

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        m.blockPreviousMatch(ARRAYFNAME[1], ARRAYLNAME[1]);
        assert(!m.noMatches() && m.howManyMatches() == 1 &&
has(m, ARRAYFNAME[0], ARRAYLNAME[0], ARRAYV[0]) &&
            !m.someoneAmongMatches(ARRAYFNAME[1],
ARRAYLNAME[1]));
    } break; case 49: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.blockPreviousMatch(ARRAYFNAME[0], ARRAYLNAME[0]);
        assert(!m.noMatches() && m.howManyMatches() == 1 &&
has(m, ARRAYFNAME[1], ARRAYLNAME[1], ARRAYV[1]) &&
            !m.someoneAmongMatches(ARRAYFNAME[0],
ARRAYLNAME[0]));
    } break; case 50: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.blockPreviousMatch(ARRAYFNAME[0], ARRAYLNAME[0]);
        m.blockPreviousMatch(ARRAYFNAME[1], ARRAYLNAME[1]);
        assert(m.howManyMatches() == 0);
    } break; case 51: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        m.blockPreviousMatch(ARRAYFNAME[1], ARRAYLNAME[1]);
        m.blockPreviousMatch(ARRAYFNAME[2], ARRAYLNAME[2]);
        m.makeMatch(ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
        assert(m.howManyMatches() == 2 && has(m,
ARRAYFNAME[0], ARRAYLNAME[0], ARRAYV[0]) &&
            has(m, ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]) && !m.someoneAmongMatches(ARRAYFNAME[1],
ARRAYLNAME[1]) &&
            !m.someoneAmongMatches(ARRAYFNAME[2],
ARRAYLNAME[2]));
    } break; case 52: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);

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        assert(!m.blockPreviousMatch(ARRAYFNAME[2],
ARRAYLNAME[2]) && m.howManyMatches() == 2);
    } break; case 53: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        std::string f;
        std::string l;
        OnlineType v;
        assert(!m.confirmMatch(-1, f, l, v));
    } break; case 54: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        std::string f = SOMEFNAME;
        std::string l = SOMEENAME;
        OnlineType v = SOMEVALUE;
        m.confirmMatch(-1, f, l, v);
        assert(f == SOMEFNAME && l == SOMEENAME && v ==
SOMEVALUE);
    } break; case 55: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        std::string f, l;
        OnlineType v;
        assert(!m.confirmMatch(2, f, l, v));
    } break; case 56: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        std::string f = SOMEFNAME;
        std::string l = SOMEENAME;
        OnlineType v = SOMEVALUE;
        m.confirmMatch(2, f, l, v);
        assert(f == SOMEFNAME && l == SOMEENAME && v ==
SOMEVALUE);
    } break; case 57: {
        m.makeMatch(DEFAULTFNAME, DEFAULTLNAME, SOMEVALUE);
        assert(m.howManyMatches() == 1 && has(m,
DEFAULTFNAME, DEFAULTLNAME, SOMEVALUE));
    } break; case 58: {

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        m.transformMatch(DEFAULTFNAME, DEFAULTLNAME,
SOMEVALUE);
        assert(m.howManyMatches() == 0 &&
!m.someoneAmongMatches(DEFAULTFNAME, DEFAULTLNAME));
        } break; case 59: {
            m.makeOrTransform(DEFAULTFNAME, DEFAULTLNAME,
SOMEVALUE);
            assert(m.howManyMatches() == 1 && has(m,
DEFAULTFNAME, DEFAULTLNAME, SOMEVALUE));
        } break; case 60: {
            m.makeMatch(DEFAULTFNAME, DEFAULTLNAME, SOMEVALUE);
            m.blockPreviousMatch(DEFAULTFNAME, DEFAULTLNAME);
            assert(m.howManyMatches() == 0 &&
!m.someoneAmongMatches(DEFAULTFNAME, DEFAULTLNAME));
        } break; case 61: {
            m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            {
                OnlineDating m2;
                m2.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
                m2.makeMatch(ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
                m2.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
                m.tradeMatches(m2);
                assert(m.howManyMatches() == 3);
            }
        } break; case 62: {
            m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            {
                OnlineDating m2;
                m2.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
                m2.makeMatch(ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
                m2.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
                m.tradeMatches(m2);
                assert(has(m, ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]) && has(m, ARRAYFNAME[2], ARRAYLNAME[2], ARRAYV[2]) &&

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                                has(m, ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]) && !m.someoneAmongMatches(ARRAYFNAME[0],
ARRAYLNAME[0]));
                                }
        } break; case 63: {
                                m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
                                m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
                                {
                                        OnlineDating m2;
                                        m2.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
                                        m2.makeMatch(ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
                                        m2.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
                                        m.tradeMatches(m2);
                                        assert(m2.howManyMatches() == 2);
                                }
        } break; case 64: {
                                m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
                                m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
                                {
                                        OnlineDating m2;
                                        m2.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
                                        m2.makeMatch(ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
                                        m2.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
                                        m.tradeMatches(m2);
                                        assert(has(m2, ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]) && has(m2, ARRAYFNAME[1], ARRAYLNAME[1], ARRAYV[1])
&&
                                                !m2.someoneAmongMatches(ARRAYFNAME[2],
ARRAYLNAME[2]) && !m2.someoneAmongMatches(ARRAYFNAME[3],
ARRAYLNAME[3]));
                                }
        } break; case 65: {
                                m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
                                m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);

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        m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        m.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
        m.makeMatch (ARRAYFNAME[4], ARRAYLNAME[4],
ARRAYV[4]);
        {
            OnlineDating m2;
            m2.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
            m2.makeMatch (ARRAYFNAME[4], ARRAYLNAME[4],
ARRAYV[4]);
            m2.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.tradeMatches (m2);
            assert (m.howManyMatches() == 3 &&
m2.howManyMatches() == 5);
        }
    } break; case 66: {
        {
            OnlineDating m2;
            m2.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m2.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            assert (m2.howManyMatches() == 2 &&
m2.someoneAmongMatches (ARRAYFNAME[1], ARRAYLNAME[1]) &&
!m2.someoneAmongMatches (ARRAYFNAME[2], ARRAYLNAME[3]));
        }
    } break; case 67: {
        {
            OnlineDating m2;
            m2.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m2.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            m2.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
            m2.blockPreviousMatch (ARRAYFNAME[1],
ARRAYLNAME[1]);
            m2.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
            m2.blockPreviousMatch (ARRAYFNAME[2],
ARRAYLNAME[2]);
            m2.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);

```

```

                m2.blockPreviousMatch (ARRAYFNAME[0],
ARRAYLNAME[0]);
                m2.blockPreviousMatch (ARRAYFNAME[3],
ARRAYLNAME[3]);
                m2.makeMatch (ARRAYFNAME[4], ARRAYLNAME[4],
ARRAYV[4]);
            }
            assert(true); // no corruption so bad that
destruction failed
        } break; case 68: {
            {
                OnlineDating m2;
                m2.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
                m2.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
                OnlineDating m3 (m2);
                m3.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
                m3.blockPreviousMatch (ARRAYFNAME[1],
ARRAYLNAME[1]);
                m3.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
                m3.blockPreviousMatch (ARRAYFNAME[2],
ARRAYLNAME[2]);
                m3.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
                m3.blockPreviousMatch (ARRAYFNAME[0],
ARRAYLNAME[0]);
                m3.blockPreviousMatch (ARRAYFNAME[3],
ARRAYLNAME[3]);
                m3.makeMatch (ARRAYFNAME[4], ARRAYLNAME[4],
ARRAYV[4]);
            }
            assert(true); // no corruption so bad that
destruction failed
        } break; case 69: {
            {
                OnlineDating m2;
                m2.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
                m2.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
                m2.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
                OnlineDating m3 (m2);
                assert (m3.howManyMatches() == 3);

```

```

    }
    } break; case 70: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        {
            OnlineDating m2(m);
            m2.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
            assert (m2.howManyMatches() ==
m.howManyMatches() + 1);
        }
    } break; case 71: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        {
            OnlineDating m2(m);
            m2.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
            assert (m2.howManyMatches() == 4 &&
m2.someoneAmongMatches (ARRAYFNAME[1], ARRAYLNAME[1]) &&
m2.someoneAmongMatches (ARRAYFNAME[3], ARRAYLNAME[3]));
        }
    } break; case 72: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        {
            OnlineDating m2(m);
            m2.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
            assert (m2.howManyMatches() == 4 &&
m2.someoneAmongMatches (ARRAYFNAME[1], ARRAYLNAME[1]) &&
!m2.someoneAmongMatches (ARRAYFNAME[4], ARRAYLNAME[4]));
        }
    } break; case 73: {
        {

```

```

        OnlineDating m2;
        m2.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m2.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m2.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        OnlineDating m3;
        m3.makeMatch (ARRAYFNAME[4], ARRAYLNAME[4],
ARRAYV[4]);
        m3.makeMatch (ARRAYFNAME[5], ARRAYLNAME[5],
ARRAYV[5]);
        m3 = m2;
        assert (m3.howManyMatches() == 3 &&
m2.howManyMatches() == 3);
    }
    } break; case 74: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        {
            OnlineDating m2;
            m2.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
            m2.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
            m2.makeMatch (ARRAYFNAME[4], ARRAYLNAME[4],
ARRAYV[4]);
            m2 = m;
            m2.makeMatch (ARRAYFNAME[5], ARRAYLNAME[5],
ARRAYV[5]);
            assert (m2.howManyMatches() ==
m.howManyMatches() + 1);
        }
    } break; case 75: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        {
            OnlineDating m2;
            m2.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
            m2.makeMatch (ARRAYFNAME[4], ARRAYLNAME[4],
ARRAYV[4]);

```



```

        m2.makeMatch (ARRAYFNAME [5], ARRAYLNAME [5],
ARRAYV [5]);
        m2 = m;
        m2.makeMatch (ARRAYFNAME [2], ARRAYLNAME [2],
ARRAYV [2]);
        assert (m2.someoneAmongMatches (ARRAYFNAME [0],
ARRAYLNAME [0]) &&
                m2.someoneAmongMatches (ARRAYFNAME [1],
ARRAYLNAME [1]) &&
                m2.someoneAmongMatches (ARRAYFNAME [2],
ARRAYLNAME [2]) &&
                !m2.someoneAmongMatches (ARRAYFNAME [3],
ARRAYLNAME [3]));
    }
    } break; case 76: {
        m.makeMatch (ARRAYFNAME [0], ARRAYLNAME [0],
ARRAYV [0]);
        m.makeMatch (ARRAYFNAME [1], ARRAYLNAME [1],
ARRAYV [1]);
        {
            OnlineDating m2;
            m2.makeMatch (ARRAYFNAME [3], ARRAYLNAME [3],
ARRAYV [3]);
            m2.makeMatch (ARRAYFNAME [4], ARRAYLNAME [4],
ARRAYV [4]);
            m2.makeMatch (ARRAYFNAME [5], ARRAYLNAME [5],
ARRAYV [5]);
            m2 = m;
            m2.makeMatch (ARRAYFNAME [2], ARRAYLNAME [2],
ARRAYV [2]);
            assert (m.someoneAmongMatches (ARRAYFNAME [0],
ARRAYLNAME [0]) &&
                    m.someoneAmongMatches (ARRAYFNAME [1],
ARRAYLNAME [1]) &&
                    !m.someoneAmongMatches (ARRAYFNAME [2],
ARRAYLNAME [2]));
        }
    } break; case 77: {
        {
            OnlineDating m2;
            m2.makeMatch (ARRAYFNAME [0], ARRAYLNAME [0],
ARRAYV [0]);
            m2.makeMatch (ARRAYFNAME [1], ARRAYLNAME [1],
ARRAYV [1]);
            m2.makeMatch (ARRAYFNAME [2], ARRAYLNAME [2],
ARRAYV [2]);
            m2 = m2;

```

```

        assert(m2.howManyMatches() == 3);
        assert(m2.someoneAmongMatches(ARRAYFNAME[0],
ARRAYLNAME[0]) &&
        m2.someoneAmongMatches(ARRAYFNAME[1],
ARRAYLNAME[1]) &&
        m2.someoneAmongMatches(ARRAYFNAME[2],
ARRAYLNAME[2]));
    }
    assert(true); // no corruption so bad that
destruction failed
    } break; case 78: {
    {
        OnlineDating m2;
        m2.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m2.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m2.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        m2 = m2;
        m2.makeMatch(ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
        assert(m2.someoneAmongMatches(ARRAYFNAME[0],
ARRAYLNAME[0]) &&
        m2.someoneAmongMatches(ARRAYFNAME[1],
ARRAYLNAME[1]) &&
        m2.someoneAmongMatches(ARRAYFNAME[2],
ARRAYLNAME[2]) &&
        m2.someoneAmongMatches(ARRAYFNAME[3],
ARRAYLNAME[3]));
    }
    } break; case 79: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        OnlineDating m2;
        OnlineDating m3;
        mergeMatches(m, m2, m3);
        assert(m3.someoneAmongMatches(ARRAYFNAME[0],
ARRAYLNAME[0]) &&
        m3.someoneAmongMatches(ARRAYFNAME[1],
ARRAYLNAME[1]) &&
        m3.someoneAmongMatches(ARRAYFNAME[2],
ARRAYLNAME[2]));

```

```

        } break; case 80: {
            m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
            OnlineDating m2;
            OnlineDating m3;
            mergeMatches(m2, m, m3);
            assert(m3.someoneAmongMatches (ARRAYFNAME[0],
ARRAYLNAME[0]) &&
                m3.someoneAmongMatches (ARRAYFNAME[1],
ARRAYLNAME[1]) &&
                m3.someoneAmongMatches (ARRAYFNAME[2],
ARRAYLNAME[2]));
        } break; case 81: {
            m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
            OnlineDating m2;
            m2.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
            m2.makeMatch (ARRAYFNAME[4], ARRAYLNAME[4],
ARRAYV[4]);
            OnlineDating m3;
            mergeMatches(m, m2, m3);
            assert(m3.someoneAmongMatches (ARRAYFNAME[0],
ARRAYLNAME[0]) &&
                m3.someoneAmongMatches (ARRAYFNAME[1],
ARRAYLNAME[1]) &&
                m3.someoneAmongMatches (ARRAYFNAME[2],
ARRAYLNAME[2]) &&
                m3.someoneAmongMatches (ARRAYFNAME[3],
ARRAYLNAME[3]) &&
                m3.someoneAmongMatches (ARRAYFNAME[4],
ARRAYLNAME[4]));
        } break; case 82: {
            m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);

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        OnlineDating m2;
        m2.makeMatch(ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
        m2.makeMatch(ARRAYFNAME[4], ARRAYLNAME[4],
ARRAYV[4]);
        OnlineDating m3;
        assert(mergeMatches(m, m2, m3));
    } break; case 83: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        OnlineDating m2;
        m2.makeMatch(ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
        m2.makeMatch(ARRAYFNAME[4], ARRAYLNAME[4],
ARRAYV[4]);
        OnlineDating m3;
        m3.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[5]);
        mergeMatches(m, m2, m3);
        assert(m3.someoneAmongMatches(ARRAYFNAME[0],
ARRAYLNAME[0]) &&
            m3.someoneAmongMatches(ARRAYFNAME[1],
ARRAYLNAME[1]) &&
            m3.someoneAmongMatches(ARRAYFNAME[2],
ARRAYLNAME[2]) &&
            m3.someoneAmongMatches(ARRAYFNAME[3],
ARRAYLNAME[3]) &&
            m3.someoneAmongMatches(ARRAYFNAME[4],
ARRAYLNAME[4]) &&
            has(m3, ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]) &&
            !has(m3, ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[5]));
    } break; case 84: {
        m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        OnlineDating m2;
        m2.makeMatch(ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);

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                m2.makeMatch(ARRAYFNAME[4], ARRAYLNAME[4],
ARRAYV[4]);
                OnlineDating m3;
                m3.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[5]);
                assert(mergeMatches(m, m2, m3));
            } break; case 85: {
                m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
                m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
                m.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
                OnlineDating m2;
                m2.makeMatch(ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
                m2.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
                OnlineDating m3;
                mergeMatches(m, m2, m3);
                assert(m3.someoneAmongMatches(ARRAYFNAME[0],
ARRAYLNAME[0]) &&
                    m3.someoneAmongMatches(ARRAYFNAME[1],
ARRAYLNAME[1]) &&
                    m3.someoneAmongMatches(ARRAYFNAME[2],
ARRAYLNAME[2]) &&
                    m3.someoneAmongMatches(ARRAYFNAME[3],
ARRAYLNAME[3]));
            } break; case 86: {
                m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
                m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
                m.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
                OnlineDating m2;
                m2.makeMatch(ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
                m2.makeMatch(ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
                OnlineDating m3;
                assert(mergeMatches(m, m2, m3));
            } break; case 87: {
                m.makeMatch(ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
                m.makeMatch(ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);

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```

        m.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
        OnlineDating m2;
        m2.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        m2.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[4]);
        OnlineDating m3;
        mergeMatches(m, m2, m3);
        assert (m3.someoneAmongMatches (ARRAYFNAME[0],
ARRAYLNAME[0]) &&
                m3.someoneAmongMatches (ARRAYFNAME[1],
ARRAYLNAME[1]) &&
                m3.someoneAmongMatches (ARRAYFNAME[2],
ARRAYLNAME[2]));
    } break; case 88: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
        OnlineDating m2;
        m2.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        m2.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[4]);
        OnlineDating m3;
        assert (!mergeMatches(m, m2, m3));
    } break; case 89: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        OnlineDating m2;
        m2.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
        m2.makeMatch (ARRAYFNAME[4], ARRAYLNAME[4],
ARRAYV[4]);
        mergeMatches(m, m2, m);
        assert (m.someoneAmongMatches (ARRAYFNAME[0],
ARRAYLNAME[0]) &&
                m.someoneAmongMatches (ARRAYFNAME[1],
ARRAYLNAME[1]) &&

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        m.someoneAmongMatches (ARRAYFNAME[2],
ARRAYLNAME[2]) &&
        m.someoneAmongMatches (ARRAYFNAME[3],
ARRAYLNAME[3]) &&
        m.someoneAmongMatches (ARRAYFNAME[4],
ARRAYLNAME[4]));
    } break; case 90: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        OnlineDating m2;
        m2.makeMatch (ARRAYFNAME[3], ARRAYLNAME[3],
ARRAYV[3]);
        m2.makeMatch (ARRAYFNAME[4], ARRAYLNAME[4],
ARRAYV[4]);
        mergeMatches(m, m2, m2);
        assert (m2.someoneAmongMatches (ARRAYFNAME[0],
ARRAYLNAME[0]) &&
                m2.someoneAmongMatches (ARRAYFNAME[1],
ARRAYLNAME[1]) &&
                m2.someoneAmongMatches (ARRAYFNAME[2],
ARRAYLNAME[2]) &&
                m2.someoneAmongMatches (ARRAYFNAME[3],
ARRAYLNAME[3]) &&
                m2.someoneAmongMatches (ARRAYFNAME[4],
ARRAYLNAME[4]));
    } break; case 91: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        OnlineDating m2;
        m2.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        authenticateMatches (ARRAYFNAME[1], ARRAYLNAME[1], m,
m2);
        assert (!m2.someoneAmongMatches (ARRAYFNAME[0],
ARRAYLNAME[0]) && m2.someoneAmongMatches (ARRAYFNAME[1],
ARRAYLNAME[1]));
    } break; case 92: {
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);

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        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        OnlineDating m2;
        authenticateMatches (ARRAYFNAME[1], ARRAYLNAME[1], m,
m2);
        assert (!m2.someoneAmongMatches (ARRAYFNAME[0],
ARRAYLNAME[0]) && m2.someoneAmongMatches (ARRAYFNAME[1],
ARRAYLNAME[1]));
        } break; case 93: {
            m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
            m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[1]);
            m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
            authenticateMatches (ARRAYFNAME[1], ARRAYLNAME[1], m,
m);
            assert (!m.someoneAmongMatches (ARRAYFNAME[0],
ARRAYLNAME[0]) && m.someoneAmongMatches (ARRAYFNAME[1],
ARRAYLNAME[1]));
            } break; case 94: {
                m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
                m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[1],
ARRAYV[1]);
                m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[2]);
                m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[1],
ARRAYV[3]);
                m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
                OnlineDating m2;
                authenticateMatches ("*", ARRAYLNAME[1], m, m2);
                assert (m2.someoneAmongMatches (ARRAYFNAME[0],
ARRAYLNAME[1]) &&
                    m2.someoneAmongMatches (ARRAYFNAME[1],
ARRAYLNAME[1]) &&
                    m2.someoneAmongMatches (ARRAYFNAME[2],
ARRAYLNAME[1]) &&
                    !m2.someoneAmongMatches (ARRAYFNAME[0],
ARRAYLNAME[0]) &&
                    !m2.someoneAmongMatches (ARRAYFNAME[2],
ARRAYLNAME[2]));
            } break; case 95: {

```



```

        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[0],
ARRAYV[1]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[2]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[2],
ARRAYV[3]);
        m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        OnlineDating m2;
        authenticateMatches (ARRAYFNAME[1], "*", m, m2);
        assert (m2.someoneAmongMatches (ARRAYFNAME[1],
ARRAYLNAME[0]) &&
                m2.someoneAmongMatches (ARRAYFNAME[1],
ARRAYLNAME[1]) &&
                m2.someoneAmongMatches (ARRAYFNAME[1],
ARRAYLNAME[2]) &&
                !m2.someoneAmongMatches (ARRAYFNAME[0],
ARRAYLNAME[0]) &&
                !m2.someoneAmongMatches (ARRAYFNAME[2],
ARRAYLNAME[2]));
    } break; case 96: {
        string all = "*";
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[0],
ARRAYV[0]);
        m.makeMatch (ARRAYFNAME[0], ARRAYLNAME[1],
ARRAYV[1]);
        m.makeMatch (ARRAYFNAME[1], ARRAYLNAME[1],
ARRAYV[2]);
        m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[1],
ARRAYV[3]);
        m.makeMatch (ARRAYFNAME[2], ARRAYLNAME[2],
ARRAYV[2]);
        OnlineDating m2;
        authenticateMatches ("*", "*", m, m2);
        assert (m2.someoneAmongMatches (ARRAYFNAME[0],
ARRAYLNAME[1]) &&
                m2.someoneAmongMatches (ARRAYFNAME[1],
ARRAYLNAME[1]) &&
                m2.someoneAmongMatches (ARRAYFNAME[2],
ARRAYLNAME[1]) &&
                m2.someoneAmongMatches (ARRAYFNAME[0],
ARRAYLNAME[0]) &&
                m2.someoneAmongMatches (ARRAYFNAME[2],
ARRAYLNAME[2]));
    } break; case 97: {

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```

        OnlineDating m2 = m;
        OnlineDating m3;
        authenticateMatches("", "", m2, m3);
        assert(m3.howManyMatches() == m.howManyMatches());
    } break; case 98: {
        OnlineDating m2;
        OnlineDating m3(m);
        authenticateMatches("", "", m2, m3);
        assert(m3.noMatches());
    } break; case 99: {
        OnlineDating m2;
        authenticateMatches("", "", m2, m2);
        assert(m2.howManyMatches() == 0);
    } break; case 100: {
        const int NITEMS = 2000;
        for (int k = 0; k < NITEMS; k++)
            assert(m.makeMatch(std::to_string(k),
std::to_string(k), SOMEVALUE));
        assert(m.howManyMatches() == NITEMS);
    }
}

int main()
{
    cout << "Enter test number: ";
    int n;
    cin >> n;
    testone(n);
    cout << "Passed" << endl;
}

```