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$ valgrind --tool=memcheck --leak-check=full --track-origins=yes ./company
==2153== Memcheck, a memory error detector
==2153== Copyright (C) 2002-2017, and GNU GPL'd, by Julian Seward et al.
==2153== Using Valgrind-3.15.0 and LibVEX; rerun with -h for copyright info
==2153== Command: ./company
==2153==
./company
a.
==2153== Conditional jump or move depends on uninitialised value(s)
==2153==   at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)
==2153==   by 0x109795: main (company_test.cpp:17)
==2153== Uninitialised value was created by a stack allocation
    std::cout << c.inSameCompany(k, l) << std::endl;
==2153==   at 0x1096E4: main (company_test.cpp:6)
int main() {
==2153==
0
==2153== Conditional jump or move depends on uninitialised value(s)
==2153==   at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)
==2153==   by 0x1097CF: main (company_test.cpp:18)
    std::cout << c.inSameCompany(k, o) << std::endl;
==2153== Uninitialised value was created by a stack allocation
==2153==   at 0x1096E4: main (company_test.cpp:6)
int main() {
==2153==
0
==2153== Conditional jump or move depends on uninitialised value(s)
==2153==   at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)
==2153==   by 0x109809: main (company_test.cpp:19)
    std::cout << c.inSameCompany(l, o) << std::endl;
==2153== Uninitialised value was created by a stack allocation
==2153==   at 0x1096E4: main (company_test.cpp:6)
int main() {
==2153==
0
b.
==2153== Conditional jump or move depends on uninitialised value(s)
==2153==   at 0x1094D0: CompanyTracker::split(int) (company.cpp:51)
void CompanyTracker::split(int i) {
==2153==   by 0x109868: main (company_test.cpp:21)
==2153== Uninitialised value was created by a stack allocation
==2153==   at 0x1096E4: main (company_test.cpp:6)
==2153==
c

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==2153== Conditional jump or move depends on uninitialised value(s)
==2153==   at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)
==2153==   by 0x1098A4: main (company_test.cpp:23)
==2153== Uninitialised value was created by a stack allocation
==2153==   at 0x1096E4: main (company_test.cpp:6)
==2153==
0
==2153== Conditional jump or move depends on uninitialised value(s)
==2153==   at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)
==2153==   by 0x1098DE: main (company_test.cpp:24)
==2153== Uninitialised value was created by a stack allocation
==2153==   at 0x1096E4: main (company_test.cpp:6)
==2153==
0
==2153== Conditional jump or move depends on uninitialised value(s)
==2153==   at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)
==2153==   by 0x109918: main (company_test.cpp:25)
==2153== Uninitialised value was created by a stack allocation
==2153==   at 0x1096E4: main (company_test.cpp:6)
==2153==
0
d.
==2153== Conditional jump or move depends on uninitialised value(s)
==2153==   at 0x1094D0: CompanyTracker::split(int) (company.cpp:51)
==2153==   by 0x109977: main (company_test.cpp:27)
==2153== Uninitialised value was created by a stack allocation
==2153==   at 0x1096E4: main (company_test.cpp:6)
==2153==
==2153== Conditional jump or move depends on uninitialised value(s)
==2153==   at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)
==2153==   by 0x10998B: main (company_test.cpp:28)
==2153== Uninitialised value was created by a stack allocation
==2153==   at 0x1096E4: main (company_test.cpp:6)
==2153==
0
==2153== Conditional jump or move depends on uninitialised value(s)
==2153==   at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)
==2153==   by 0x1099C5: main (company_test.cpp:29)
==2153== Uninitialised value was created by a stack allocation
==2153==   at 0x1096E4: main (company_test.cpp:6)
==2153==
0
==2153== Conditional jump or move depends on uninitialised value(s)
==2153==   at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)

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==2153== by 0x1099FF: main (company_test.cpp:30)
==2153== Uninitialised value was created by a stack allocation
==2153== at 0x1096E4: main (company_test.cpp:6)
==2153==
0
e.
==2153== Conditional jump or move depends on uninitialised value(s)
==2153== at 0x1094D0: CompanyTracker::split(int) (company.cpp:51)
==2153== by 0x109A5E: main (company_test.cpp:32)
==2153== Uninitialised value was created by a stack allocation
==2153== at 0x1096E4: main (company_test.cpp:6)
==2153==
==2153== Conditional jump or move depends on uninitialised value(s)
==2153== at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)
==2153== by 0x109A72: main (company_test.cpp:33)
==2153== Uninitialised value was created by a stack allocation
std::cout << c.inSameCompany(l, o) << std::endl;
==2153== at 0x1096E4: main (company_test.cpp:6)
==2153==
0
==2153== Conditional jump or move depends on uninitialised value(s)
==2153== at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)
==2153== by 0x109AAC: main (company_test.cpp:34)
==2153== Uninitialised value was created by a stack allocation
==2153== at 0x1096E4: main (company_test.cpp:6)
==2153==
0
==2153== Conditional jump or move depends on uninitialised value(s)
==2153== at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)
==2153== by 0x109AE6: main (company_test.cpp:35)
==2153== Uninitialised value was created by a stack allocation
==2153== at 0x1096E4: main (company_test.cpp:6)
==2153==
0

**
==2173== Conditional jump or move depends on uninitialised value(s)
==2173== at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)
bool CompanyTracker::inSameCompany(int i, int j) {
==2173== by 0x109404: CompanyTracker::merge(int, int) (company.cpp:32)
void CompanyTracker::merge(int i, int j) {
==2173== by 0x10976D: main (company_test.cpp:12)
==2173== Uninitialised value was created by a stack allocation

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c.merge(k, l);  
c.merge(k, o);
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==2173== at 0x1096E4: main (company_test.cpp:6)  
==2173==  
==2173== Conditional jump or move depends on uninitialised value(s)  
==2173== at 0x109416: CompanyTracker::merge(int, int) (company.cpp:34)  
==2173== by 0x10976D: main (company_test.cpp:12)  
==2173== Uninitialised value was created by a stack allocation  
==2173== at 0x1096E4: main (company_test.cpp:6)  
==2173==  
==2173== Conditional jump or move depends on uninitialised value(s)  
==2173== at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)  
==2173== by 0x109404: CompanyTracker::merge(int, int) (company.cpp:32)  
==2173== by 0x109781: main (company_test.cpp:13)  
==2173== Uninitialised value was created by a stack allocation  
==2173== at 0x1096E4: main (company_test.cpp:6)  
==2173==  
==2173== Conditional jump or move depends on uninitialised value(s)  
==2173== at 0x109416: CompanyTracker::merge(int, int) (company.cpp:34)  
==2173== by 0x109781: main (company_test.cpp:13)  
==2173== Uninitialised value was created by a stack allocation  
==2173== at 0x1096E4: main (company_test.cpp:6)  
==2173==  
**  
==2153== at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)  
==2153== by 0x109795: main (company_test.cpp:17)  
==2153== Uninitialised value was created by a stack allocation  
std::cout << c.inSameCompany(k, l) << std::endl;  
==2153== at 0x1096E4: main (company_test.cpp:6)  
int main() {  
==2153==  
==2153== Conditional jump or move depends on uninitialised value(s)  
==2153== at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)  
==2153== by 0x1097CF: main (company_test.cpp:18)  
std::cout << c.inSameCompany(k, o) << std::endl;  
==2153== Uninitialised value was created by a stack allocation  
==2153== at 0x1096E4: main (company_test.cpp:6)  
int main() {  
==2153==  
0  
==2153== Conditional jump or move depends on uninitialised value(s)  
==2153== at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)  
==2153== by 0x109809: main (company_test.cpp:19)
```

```

std::cout << c.inSameCompany(l, o) << std::endl;
==2153== Uninitialised value was created by a stack allocation
==2153== at 0x1096E4: main (company_test.cpp:6)
int main() {
==2153==
0
b.
==2153== Conditional jump or move depends on uninitialised value(s)
==2153== at 0x1094D0: CompanyTracker::split(int) (company.cpp:51)
void CompanyTracker::split(int i) {
==2153== by 0x109868: main (company_test.cpp:21)
==2153== Uninitialised value was created by a stack allocation
==2153== at 0x1096E4: main (company_test.cpp:6)
==2153==
c
==2153== Conditional jump or move depends on uninitialised value(s)
==2153== at 0x109565: CompanyTracker::inSameCompany(int, int) (company.cpp:69)
==2153== by 0x1098A4: main (company_test.cpp:23)
==2153== Uninitialised value was created by a stack allocation
==2153== at 0x1096E4: main (company_test.cpp:6)
==2153==

==2173==
==2173== HEAP SUMMARY:
==2173== in use at exit: 0 bytes in 1 blocks
==2173== total heap usage: 4 allocs, 3 frees, 74,752 bytes allocated
==2173==
==2173== 0 bytes in 1 blocks are definitely lost in loss record 1 of 1
==2173== at 0x483C583: operator new[](unsigned long) (in
/usr/lib/x86_64-linux-gnu/valgrind/vgpreload_memcheck-amd64-linux.so)
==2173== by 0x1092E9: CompanyTracker::CompanyTracker(int) (company.cpp:9)
==2173== by 0x109759: main (company_test.cpp:12)
==2173==
==2173== LEAK SUMMARY:
==2173== definitely lost: 0 bytes in 1 blocks
==2173== indirectly lost: 0 bytes in 0 blocks
==2173== possibly lost: 0 bytes in 0 blocks
==2173== still reachable: 0 bytes in 0 blocks
==2173== suppressed: 0 bytes in 0 blocks
==2173==
==2173== For lists of detected and suppressed errors, rerun with: -s
==2173== ERROR SUMMARY: 20 errors from 20 contexts (suppressed: 0 from 0)

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