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Profile data file 'callgrind.out.133674' (creator: callgrind-3.22.0)

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:I1 cache

:D1 cache

:LL cache

Timerange: Basic block 0 - 360105

Trigger: Program termination

Profiled target:  ./main -v 4 -e 4 -r 2 (PID 133674, part 1)

Events recorded:  Ir

Events shown:    Ir

Event sort order: Ir

Thresholds:    99

:Include dirs

:User annotated

Auto-annotation:  on


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Ir

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PROGRAM TOTALS   (100.0%) 2,033,914


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Ir         file:function

--------------------------------------------------------------------------------

elf/./elf/dl-lookup.c:do_lookup_x [/usr/lib/x86_64-linux-/.  (24.42%) 496,639
gnu/ld-linux-x86-64.so.2]

elf/../sysdeps/generic/dl-new-hash.h:_dl_lookup_symbol_x/.  (24.19%) 492,070

elf/./elf/dl-lookup.c:_dl_lookup_symbol_x [/usr/lib/x86_64-/. (9.10% ) 185,073 linux-gnu/ld-linux-x86-64.so.2]

elf/./elf/dl-reloc.c:_dl_relocate_object [/usr/lib/x86_64-/. (7.21% ) 146,564 linux-gnu/ld-linux-x86-64.so.2]

elf/./elf/dl-lookup.c:check_match [/usr/lib/x86_64-linux-/. (5.54% ) 112,600 gnu/ld-linux-x86-64.so.2]

elf/../sysdeps/x86_64/dl-machine.h:_dl_relocate_object/. (5.47% ) 111,236

elf/./elf/do-rel.h:_dl_relocate_object/. (5.42% ) 110,283

string/../sysdeps/x86_64/multiarch/../multiarch/strcmp-/. (3.31% ) 67,223 sse2.S:strcmp [/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

elf/./elf/dl-tunables.c:__GI___tunables_init [/usr/lib/x86_64-/. (1.11% ) 22,485 linux-gnu/ld-linux-x86-64.so.2]

std::mersenne_twister_engine<unsigned long, 32ul, :??? (1.00% ) 20,295 624ul, 397ul, 31ul, 2567483615ul, 11ul, 4294967295ul, 7ul, 2636928640ul, 15ul, 4022730752ul, 18ul, 1812433253ul>::_M_gen_rand() [/home/dael/projects/operating_sys/EX4/q4/main]

elf/./elf/dl-version.c:_dl_check_map_versions /. (0.76% ) 15,372 [/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

std::mersenne_twister_engine<unsigned long, 32ul, :??? (0.74% ) 14,972 624ul, 397ul, 31ul, 2567483615ul, 11ul, 4294967295ul, 7ul, 2636928640ul, 15ul, 4022730752ul, 18ul, 1812433253ul>::seed(unsigned long) [/home/dael/projects/operating_sys/EX4/q4/main]

std::__detail::_Mod<unsigned long, 624ul, 1ul, 0ul, true, :??? (0.61% ) 12,460 true>::__calc(unsigned long) [/home/dael/projects/operating_sys/EX4/q4/main]

std::locale::_Impl::_M_install_facet(std::locale::id :??? (0.60% ) 12,192 const*, std::locale::facet const*) [/usr/lib/x86_64-linux-gnu/libstdc++.so.6.0.33]

elf/../sysdeps/generic/ldsodefs.h:_dl_relocate_object/. (0.51% ) 10,409

elf/../sysdeps/generic/ldsodefs.h:do_lookup_x/. (0.47% ) 9,465

wcsmbs/./wcsmbs/btowc.c:btowc [/usr/lib/x86_64-linux-/. (0.45% ) 9,216 gnu/libc.so.6]

elf/./elf/dl-runtime.c:_dl_fixup [/usr/lib/x86_64-linux-gnu/ld-/. (0.38% ) 7,629 linux-x86-64.so.2]

elf/../sysdeps/generic/dl-protected.h:do_lookup_x/. (0.37% ) 7,572

unsigned long std::__detail::__mod<unsigned long, :??? (0.37% ) 7,488
4294967296ul, 1ul, 0ul>(unsigned long)
[/home/dael/projects/operating_sys/EX4/q4/main]

unsigned long std::__detail::__mod<unsigned long, 624ul, :??? (0.37% ) 7,476
1ul, 0ul>(unsigned long) [/home/dael/projects/operating_sys/EX4/q4/main]

std::__detail::_Mod<unsigned long, 4294967296ul, 1ul, :??? (0.34% ) 6,864
0ul, true, true>::__calc(unsigned long)
[/home/dael/projects/operating_sys/EX4/q4/main]

malloc/./malloc/malloc.c:_int_malloc [/usr/lib/x86_64-linux-/. (0.25% ) 5,033
gnu/libc.so.6]

libio/./libio/fileops.c:_IO_file_xsputn@@GLIBC_2.2.5 /. (0.21% ) 4,370
[/usr/lib/x86_64-linux-gnu/libc.so.6]

elf/./elf/dl-load.c:_dl_map_object_from_fd [/usr/lib/x86_64-/. (0.19% ) 3,856
linux-gnu/ld-linux-x86-64.so.2]

libio/./libio/iofwrite.c:fwrite [/usr/lib/x86_64-linux-/. (0.18% ) 3,704
gnu/libc.so.6]

elf/./elf/dl-misc.c:_dl_name_match_p [/usr/lib/x86_64-linux-/. (0.16% ) 3,208
gnu/ld-linux-x86-64.so.2]

wcsmbs/./wcsmbs/wctob.c:wctob [/usr/lib/x86_64-linux-/. (0.16% ) 3,200
gnu/libc.so.6]

elf/../sysdeps/x86_64/dl-/. (0.16% ) 3,157
trampoline.h:_dl_runtime_resolve_xsave [/usr/lib/x86_64-linux-gnu/ld-linux-x86-
64.so.2]

elf/../sysdeps/x86/dl-/. (0.15% ) 3,096
cacheinfo.h:intel_check_word.constprop.0 [/usr/lib/x86_64-linux-gnu/ld-linux-
x86-64.so.2]

malloc/./malloc/malloc.c:_int_free [/usr/lib/x86_64-linux-/. (0.15% ) 2,999
gnu/libc.so.6]

elf/./elf/dl-cache.c:_dl_cache_libcmp [/usr/lib/x86_64-linux-/. (0.14% ) 2,805
gnu/ld-linux-x86-64.so.2]

std::ctype<wchar_t>::_M_initialize_ctype() :??? (0.13% ) 2,736
[/usr/lib/x86_64-linux-gnu/libstdc++.so.6.0.33]

std::basic_ostream<char, std::char_traits<char> >& :??? (0.12% ) 2,394
std::__ostream_insert<char, std::char_traits<char> >(std::basic_ostream<char,

std::char_traits<char> >&, char const*, long) [/usr/lib/x86_64-linux-gnu/libstdc++.so.6.0.33]

elf/./elf/dl-deps.c:_dl_map_object_deps [/usr/lib/x86_64-/.  (0.12% ) 2,378 linux-gnu/ld-linux-x86-64.so.2]

elf/./elf/dl-load.c:_dl_map_object [/usr/lib/x86_64-linux-/.  (0.12% ) 2,367 gnu/ld-linux-x86-64.so.2]

malloc/./malloc/malloc.c:malloc [/usr/lib/x86_64-linux-/.  (0.11% ) 2,293 gnu/libc.so.6]

elf/../bits/stdlib-bsearch.h:intel_check_word.constprop.0/.  (0.11% ) 2,268

std::ostreambuf_iterator<char, std::char_traits<char> > :???  (0.11% ) 2,137 std::num_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > >::_M_insert_int<long>(std::ostreambuf_iterator<char, std::char_traits<char> >, std::ios_base&, char, long) const [/usr/lib/x86_64-linux-gnu/libstdc++.so.6.0.33]

std::ostream::sentry::sentry(std::ostream&) :???  (0.09% ) 1,857 [/usr/lib/x86_64-linux-gnu/libstdc++.so.6.0.33]

elf/./elf/dl-tunables.h:__GI___tunables_init/.  (0.09% ) 1,840

elf/./elf/get-dynamic-info.h:_dl_map_object_from_fd/.  (0.09% ) 1,809

string/../sysdeps/x86_64/multiarch/strlen-/.  (0.08% ) 1,582 avx2.S:__strlen_avx2 [/usr/lib/x86_64-linux-gnu/libc.so.6]

malloc/./malloc/malloc.c:free [/usr/lib/x86_64-linux-/.  (0.07% ) 1,372 gnu/libc.so.6]

std::ostream& std::ostream::_M_insert<long>(long) :???  (0.07% ) 1,355 [/usr/lib/x86_64-linux-gnu/libstdc++.so.6.0.33]

elf/./elf/dl-minimal-malloc.c:__minimal_malloc /.  (0.07% ) 1,339 [/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

elf/./elf/rtld.c:dl_main [/usr/lib/x86_64-linux-gnu/ld-linux-x86-/.  (0.06% ) 1,260 64.so.2]

elf/./elf/dl-cache.c:_dl_load_cache_lookup [/usr/lib/x86_64-/.  (0.06% ) 1,204 linux-gnu/ld-linux-x86-64.so.2]

libio/./libio/fileops.c:_IO_file_overflow@@GLIBC_2.2.5 /.  (0.06% ) 1,162 [/usr/lib/x86_64-linux-gnu/libc.so.6]

string/../sysdeps/x86_64/multiarch/memmove-vec-/. (0.06% ) 1,121 unaligned-erms.S:__mempcpy_avx_unaligned_erms [/usr/lib/x86_64-linux-gnu/libc.so.6]

elf/./elf/dl-object.c:_dl_new_object [/usr/lib/x86_64-linux-/. (0.05% ) 1,116 gnu/ld-linux-x86-64.so.2]

string/../sysdeps/x86_64/multiarch/memcmp-avx2-/. (0.05% ) 1,095 movbe.S:__memcmp_avx2_movbe [/usr/lib/x86_64-linux-gnu/libc.so.6]

std::locale::id::_M_id() const [/usr/lib/x86_64-linux-:??? (0.05% ) 1,086 gnu/libstdc++.so.6.0.33]

wctype/./wctype/wctype_l.c:wctype_l [/usr/lib/x86_64-linux-/. (0.05% ) 1,066 gnu/libc.so.6]

libio/./libio/libioP.h:fwrite/. (0.05% ) 975

elf/./elf/dl-tunables.c:__tunable_get_val [/usr/lib/x86_64-/. (0.04% ) 908 linux-gnu/ld-linux-x86-64.so.2]

string/../sysdeps/x86_64/multiarch/../multiarch/memset-vec-/. (0.04% ) 871 unaligned-erms.S:memset [/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

stdlib/./stdlib/cxa_finalize.c:__cxa_finalize [/usr/lib/x86_64-/. (0.04% ) 814 linux-gnu/libc.so.6]

int :??? (0.04% ) 810 std::uniform_int_distribution<int>::operator()<std::mersenne_twister_engine<un signed long, 32ul, 624ul, 397ul, 31ul, 2567483615ul, 11ul, 4294967295ul, 7ul, 2636928640ul, 15ul, 4022730752ul, 18ul, 1812433253ul> >(std::mersenne_twister_engine<unsigned long, 32ul, 624ul, 397ul, 31ul, 2567483615ul, 11ul, 4294967295ul, 7ul, 2636928640ul, 15ul, 4022730752ul, 18ul, 1812433253ul>&, std::uniform_int_distribution<int>::param_type const&) [/home/dael/projects/operating_sys/EX4/q4/main]

string/../sysdeps/x86_64/multiarch/../multiarch/strlen-/. (0.04% ) 808 sse2.S:strlen [/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

std::basic_ostream<char, std::char_traits<char> >& :??? (0.04% ) 800 std::operator<< <std::char_traits<char> >(std::basic_ostream<char, std::char_traits<char> >&, char const*) [/usr/lib/x86_64-linux-gnu/libstdc++.so.6.0.33]

string/../sysdeps/x86_64/multiarch/../multiarch/strchr-/. (0.04% ) 792 sse2.S:index [/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

graph::Graph::~Graph() :??? (0.04% ) 790
[/home/dael/projects/operating_sys/EX4/q4/main]

operator new(unsigned long) [/usr/lib/x86_64-linux-:??? (0.04% ) 784
gnu/libstdc++.so.6.0.33]

malloc/./malloc/malloc.c:ptmalloc_init.part.0/. (0.04% ) 771

iconv/./iconv/gconv_simple.c:__gconv_btwoc_ascii /. (0.04% ) 768
[/usr/lib/x86_64-linux-gnu/libc.so.6]

std::ctype<char>::_M_widen_init() const [/usr/lib/x86_64-:??? (0.04% ) 754
linux-gnu/libstdc++.so.6.0.33]

elf/./elf/dl-load.c:open_path [/usr/lib/x86_64-linux-gnu/ld-/. (0.04% ) 722
linux-x86-64.so.2]

elf/./dl-map-segments.h:_dl_map_object_from_fd/. (0.03% ) 695

std::locale::_Impl::_Impl(unsigned long) [/usr/lib/x86_64-:??? (0.03% ) 673
linux-gnu/libstdc++.so.6.0.33]

libio/./libio/fileops.c:_IO_do_write@@GLIBC_2.2.5 /. (0.03% ) 653
[/usr/lib/x86_64-linux-gnu/libc.so.6]

elf/./elf/libc-dl-profstub.c:_dl_mcount_wrapper_check /. (0.03% ) 640
[/usr/lib/x86_64-linux-gnu/libc.so.6]

elf/./elf/dl-load.c:open_verify.constprop.0 [/usr/lib/x86_64-/. (0.03% ) 628
linux-gnu/ld-linux-x86-64.so.2]

x0000000000146900 [/usr/lib/x86_64-linux-0:??? (0.03% ) 621
gnu/libstdc++.so.6.0.33]

string/../sysdeps/x86_64/multiarch/memmove-vec-/. (0.03% ) 604
unaligned-erms.S:memcpy [/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

misc/../sysdeps/unix/sysv/linux/mmap64.c:mmap /. (0.03% ) 601
[/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

void std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, :??? (0.03% ) 583
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> > >::_M_construct_node<std::pair<int, int>
const&>(std::_Rb_tree_node<std::pair<int, int> >*, std::pair<int, int> const&)
[/home/dael/projects/operating_sys/EX4/q4/main]

stdlib/./stdlib/getenv.c:getenv [/usr/lib/x86_64-linux-/. (0.03% ) 578
gnu/libc.so.6]

graph::Neighbor::Neighbor(int, int, graph::Neighbor*) :??? (0.03% ) 570 [/home/dael/projects/operating_sys/EX4/q4/main]

graph::Graph::generateRandomGraph(int, int) :??? (0.03% ) 553 [/home/dael/projects/operating_sys/EX4/q4/main]

elf/./elf/dl-sort-maps.c:dfs_traversal.part.0 [/usr/lib/x86_64-/. (0.03% ) 548 linux-gnu/ld-linux-x86-64.so.2]

elf/./elf/dl-catch.c:_dl_catch_exception [/usr/lib/x86_64-linux-/. (0.03% ) 546 gnu/ld-linux-x86-64.so.2]

elf/./elf/dl-hwcaps_split.c:_dl_hwcaps_split_masked /. (0.03% ) 544 [/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

libio/./libio/ioflush.c:fflush [/usr/lib/x86_64-linux-/. (0.03% ) 540 gnu/libc.so.6]

elf/../sysdeps/nptl/dl-tls_init_tp.c:rtld_mutex_dummy /. (0.03% ) 534 [/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

std::mersenne_twister_engine<unsigned long, 32ul, :??? (0.03% ) 528 624ul, 397ul, 31ul, 2567483615ul, 11ul, 4294967295ul, 7ul, 2636928640ul, 15ul, 4022730752ul, 18ul, 1812433253ul>::operator()() [/home/dael/projects/operating_sys/EX4/q4/main]

graph::Graph::cloneList(graph::Neighbor*) :??? (0.03% ) 520 [/home/dael/projects/operating_sys/EX4/q4/main]

[???] x00000000048ecb800:??? (0.03% ) 517

elf/../sysdeps/x86/dl-cacheinfo.h:handle_intel.constprop.0 /. (0.03% ) 516 [/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

wcsmbs/./wcsmbsload.h:btowc/. (0.03% ) 512

x0000000000142070 [/usr/lib/x86_64-linux-0:??? (0.02% ) 506 gnu/libstdc++.so.6.0.33]

elf/./elf/dl-init.c:call_init.part.0 [/usr/lib/x86_64-linux-gnu/ld-/. (0.02% ) 490 linux-x86-64.so.2]

std::pair<int, int> const& std::forward<std::pair<int, int> :??? (0.02% ) 490 const&>(std::remove_reference<std::pair<int, int> const&>::type&) [/home/dael/projects/operating_sys/EX4/q4/main]

std::locale::locale() [/usr/lib/x86_64-linux-:??? (0.02% ) 484 gnu/libstdc++.so.6.0.33]

graph::Graph::addEdge(int, int, int) :??? (0.02% ) 483
[/home/dael/projects/operating_sys/EX4/q4/main]

posix/./posix/getopt.c:_getopt_internal_r [/usr/lib/x86_64-/. (0.02% ) 481
linux-gnu/libc.so.6]

std::ios_base::ios_base() [/usr/lib/x86_64-linux-:??? (0.02% ) 480
gnu/libstdc++.so.6.0.33]

graph::Algorithms::Euler_circle(graph::Graph const&, int) :??? (0.02% ) 478
[/home/dael/projects/operating_sys/EX4/q4/main]

stdlib/./stdlib/cxa_atexit.c:__cxa_atexit [/usr/lib/x86_64-linux-/. (0.02% ) 468
gnu/libc.so.6]

std::ostream::flush() [/usr/lib/x86_64-linux-:??? (0.02% ) 461
gnu/libstdc++.so.6.0.33]

libio/./libio/fileops.c:_IO_file_write@@GLIBC_2.2.5 /. (0.02% ) 456
[/usr/lib/x86_64-linux-gnu/libc.so.6]

elf/./dl-find_object.h:_dl_find_object_from_map /. (0.02% ) 441
[/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

stdlib/./stdlib/cxa_atexit.c:__new_exitfn [/usr/lib/x86_64-linux-/. (0.02% ) 440
gnu/libc.so.6]

(0.02% ) 417
std::__cxx11::numpunct<char>::_M_initialize_numpunct(__locale_struct*) :???
[/usr/lib/x86_64-linux-gnu/libstdc++.so.6.0.33]

(0.02% ) 417
std::numpunct<char>::_M_initialize_numpunct(__locale_struct*) :???
[/usr/lib/x86_64-linux-gnu/libstdc++.so.6.0.33]

graph::Graph::print_graph() const :??? (0.02% ) 415
[/home/dael/projects/operating_sys/EX4/q4/main]

libio/./libio/fileops.c:_IO_file_sync@@GLIBC_2.2.5 /. (0.02% ) 399
[/usr/lib/x86_64-linux-gnu/libc.so.6]

gnu_cxx::stdio_sync_filebuf<char, __:??? (0.02% ) 390
std::char_traits<char> >::xsputn(char const*, long) [/usr/lib/x86_64-linux-
gnu/libstdc++.so.6.0.33]

elf/./get-dynamic-info.h:dl_main/. (0.02% ) 386

string/../sysdeps/x86_64/multiarch/memmove-vec-/. (0.02% ) 375
unaligned-erms.S:mempcpy [/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

elf/./elf/dl-sort-maps.c:_dl_sort_maps [/usr/lib/x86_64-linux-/.  (0.02% ) 374
gnu/ld-linux-x86-64.so.2]

cpu_indicator_init [/usr/lib/x86_64-linux-__:???  (0.02% ) 364
gnu/libgcc_s.so.1]

(0.02% ) 353
std::__cxx11::numpunct<wchar_t>::_M_initialize_numpunct(__locale_struct:???
*) [/usr/lib/x86_64-linux-gnu/libstdc++.so.6.0.33]

(0.02% ) 353
std::numpunct<wchar_t>::_M_initialize_numpunct(__locale_struct*) :???
[/usr/lib/x86_64-linux-gnu/libstdc++.so.6.0.33]

std::ostream::put(char) [/usr/lib/x86_64-linux-:???  (0.02% ) 352
gnu/libstdc++.so.6.0.33]

std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, :???  (0.02% ) 348
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> > >::_M_get_insert_unique_pos(std::pair<int,
int> const&) [/home/dael/projects/operating_sys/EX4/q4/main]

elf/../elf/dl-tls.c:_dl_allocate_tls_storage [/usr/lib/x86_64-/.  (0.02% ) 340
linux-gnu/ld-linux-x86-64.so.2]

libio/./libio/genops.c:_IO_default_xsputn [/usr/lib/x86_64-/.  (0.02% ) 336
linux-gnu/libc.so.6]

setjmp/../sysdeps/x86_64/setjmp.S:__sigsetjmp /.  (0.02% ) 334
[/usr/lib/x86_64-linux-gnu/libc.so.6]

std::_Rb_tree_node<std::pair<int, int> >::_M_valptr() :???  (0.02% ) 319
[/home/dael/projects/operating_sys/EX4/q4/main]

elf/./elf/dl-load.c:_dl_init_paths [/usr/lib/x86_64-linux-gnu/ld-/.  (0.02% ) 318
linux-x86-64.so.2]

unsigned int :???  (0.02% ) 315
std::uniform_int_distribution<int>::_S_nd<unsigned long,
std::mersenne_twister_engine<unsigned long, 32ul, 624ul, 397ul, 31ul,
2567483615ul, 11ul, 4294967295ul, 7ul, 2636928640ul, 15ul, 4022730752ul,
18ul, 1812433253ul>, unsigned int>(std::mersenne_twister_engine<unsigned
long, 32ul, 624ul, 397ul, 31ul, 2567483615ul, 11ul, 4294967295ul, 7ul,
2636928640ul, 15ul, 4022730752ul, 18ul, 1812433253ul>&, unsigned int)
[/home/dael/projects/operating_sys/EX4/q4/main]

std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, :??? (0.02% ) 308
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> > >::_M_get_Node_allocator()
[/home/dael/projects/operating_sys/EX4/q4/main]

elf/./elf/dl-load.c:_dl_process_pt_gnu_property /. (0.02% ) 306
[/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

elf/./elf/dl-object.c:_dl_add_to_namespace_list /. (0.01% ) 301
[/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

stdlib/../stdlib/strtol_l.c:___strtol_l_internal [/usr/lib/x86_64-/. (0.01% ) 300
linux-gnu/libc.so.6]

x00000000000ed260 [/usr/lib/x86_64-linux-0:??? (0.01% ) 298
gnu/libstdc++.so.6.0.33]

graph::Graph::isInside(std::set<std::pair<int, int>, :??? (0.01% ) 298
std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> > >, int, int)
[/home/dael/projects/operating_sys/EX4/q4/main]

elf/./elf/dl-fini.c:_dl_fini [/usr/lib/x86_64-linux-gnu/ld-linux-/. (0.01% ) 297
x86-64.so.2]

gnu_cxx::__aligned_membuf<std::pair<int, int> __:??? (0.01% ) 290
>::_M_ptr() [/home/dael/projects/operating_sys/EX4/q4/main]

std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, :??? (0.01% ) 286
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> >
>::_M_destroy_node(std::_Rb_tree_node<std::pair<int, int> >*)
[/home/dael/projects/operating_sys/EX4/q4/main]

std::__new_allocator<std::_Rb_tree_node<std::pair<int, :??? (0.01% ) 286
int> > >::allocate(unsigned long, void const*)
[/home/dael/projects/operating_sys/EX4/q4/main]

std::_Rb_tree_iterator<std::pair<int, int> > :??? (0.01% ) 283
std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, std::_Identity<std::pair<int,
int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> >
>::_M_insert_<std::pair<int, int> const&, std::_Rb_tree<std::pair<int, int>,
std::pair<int, int>, std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int>
>, std::allocator<std::pair<int, int> > >::_Alloc_node>(std::_Rb_tree_node_base*,
std::_Rb_tree_node_base*, std::pair<int, int> const&,
std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, std::_Identity<std::pair<int,

int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> > >::_Alloc_node&) [/home/dael/projects/operating_sys/EX4/q4/main]

elf/./elf/dl-find_object.c:_dlfo_process_initial [/usr/lib/x86_64-/.  (0.01% ) 282
linux-gnu/ld-linux-x86-64.so.2]

elf/./elf/dl-tunables.c:__GI___tunable_set_val /.  (0.01% ) 280
[/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

elf/./elf/dl-load.c:_dl_dst_count [/usr/lib/x86_64-linux-gnu/ld-/.  (0.01% ) 276
linux-x86-64.so.2]

std::_Rb_tree_node<std::pair<int, int> >::_M_valptr() const :???  (0.01% ) 275
[/home/dael/projects/operating_sys/EX4/q4/main]

elf/./elf/dl-environ.c:_dl_next_ld_env_entry [/usr/lib/x86_64-/.  (0.01% ) 274
linux-gnu/ld-linux-x86-64.so.2]

elf/./elf/dl-lookup-direct.c:_dl_lookup_direct [/usr/lib/x86_64-/.  (0.01% ) 274
linux-gnu/ld-linux-x86-64.so.2]

std::ios_base::Init::Init() [/usr/lib/x86_64-linux-:???  (0.01% ) 272
gnu/libstdc++.so.6.0.33]

libio/./libio/libioP.h:fflush/.  (0.01% ) 270

elf/./get-dynamic-info.h:_dl_start/.  (0.01% ) 268

elf/./elf/dl-deps.c:openaux [/usr/lib/x86_64-linux-gnu/ld-linux-/.  (0.01% ) 264
x86-64.so.2]

[???] x00000000048eb0400:???  (0.01% ) 261

std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, :???  (0.01% ) 260
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> > >::_Rb_tree_impl<std::less<std::pair<int, int>
>, true>::_Rb_tree_impl(std::_Rb_tree<std::pair<int, int>, std::pair<int, int>,
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> > >::_Rb_tree_impl<std::less<std::pair<int, int>
>, true> const&) [/home/dael/projects/operating_sys/EX4/q4/main]

(0.01% ) 258
io/../sysdeps/unix/sysv/linux/open64_nocancel.c:__open_nocancel /.
[/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

string/../string/strcspn.c:strcspn [/usr/lib/x86_64-linux-gnu/ld-/.  (0.01% ) 254
linux-x86-64.so.2]

std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, :???  (0.01% ) 253
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> >
>::_M_put_node(std::_Rb_tree_node<std::pair<int, int> >*)
[/home/dael/projects/operating_sys/EX4/q4/main]

std::ostream::operator<<(int) [/usr/lib/x86_64-linux-:???  (0.01% ) 253
gnu/libstdc++.so.6.0.33]

gnu_cxx::__aligned_membuf<std::pair<int, int> __:???  (0.01% ) 250
>::_M_ptr() const [/home/dael/projects/operating_sys/EX4/q4/main]

elf/./elf/dl-find_object.c:_dlfo_sort_mappings [/usr/lib/x86_64-/.  (0.01% ) 248
linux-gnu/ld-linux-x86-64.so.2]

elf/./elf/dl-minimal.c:strsep [/usr/lib/x86_64-linux-gnu/ld-/.  (0.01% ) 248
linux-x86-64.so.2]

elf/./elf/rtld.c:_dl_start [/usr/lib/x86_64-linux-gnu/ld-linux-x86-/.  (0.01% ) 247
64.so.2]

elf/./elf/dl-call_fini.c:_dl_call_fini [/usr/lib/x86_64-linux-/.  (0.01% ) 246
gnu/ld-linux-x86-64.so.2]

std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, :???  (0.01% ) 246
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> > >::_M_erase(std::_Rb_tree_node<std::pair<int,
int> >*) [/home/dael/projects/operating_sys/EX4/q4/main]

stdlib/./stdlib/exit.c:__run_exit_handlers [/usr/lib/x86_64-/.  (0.01% ) 244
linux-gnu/libc.so.6]

std::_Rb_tree_node<std::pair<int, int> >* :???  (0.01% ) 242
std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, std::_Identity<std::pair<int,
int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> >
>::_M_create_node<std::pair<int, int> const&>(std::pair<int, int> const&)
[/home/dael/projects/operating_sys/EX4/q4/main]

std::uniform_int_distribution<int>::param_type::a() const :???  (0.01% ) 240
[/home/dael/projects/operating_sys/EX4/q4/main]

graph::Graph::Graph(graph::Graph const&) :???  (0.01% ) 236
[/home/dael/projects/operating_sys/EX4/q4/main]

elf/../sysdeps/x86/dl-/.  (0.01% ) 231
cacheinfo.h:init_cpu_features.constprop.0

graph::Graph::Graph(int) :??? (0.01% ) 225
[/home/dael/projects/operating_sys/EX4/q4/main]

std::ios_base::_M_init() [/usr/lib/x86_64-linux-:??? (0.01% ) 224
gnu/libstdc++.so.6.0.33]

std::pair<std::_Rb_tree_iterator<std::pair<int, int> >, bool> :??? (0.01% ) 224
std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, std::_Identity<std::pair<int,
int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> >
>::_M_insert_unique<std::pair<int, int> const&>(std::pair<int, int> const&)
[/home/dael/projects/operating_sys/EX4/q4/main]

elf/../sysdeps/x86/dl-/. (0.01% ) 223
cacheinfo.h:get_common_cache_info.constprop.0 [/usr/lib/x86_64-linux-gnu/ld-
linux-x86-64.so.2]

[???] x00000000048ea8000:??? (0.01% ) 223

main [/home/dael/projects/operating_sys/EX4/q4/main]:??? (0.01% ) 223

elf/./elf/dl-hwcaps.c:_dl_important_hwcaps [/usr/lib/x86_64-/. (0.01% ) 222
linux-gnu/ld-linux-x86-64.so.2]

elf/../sysdeps/unix/sysv/linux/dl-/. (0.01% ) 211
sysdep.c:_dl_sysdep_parse_arguments [/usr/lib/x86_64-linux-gnu/ld-linux-x86-
64.so.2]

int :??? (0.01% ) 210
std::uniform_int_distribution<int>::operator()<std::mersenne_twister_engine<un
signed long, 32ul, 624ul, 397ul, 31ul, 2567483615ul, 11ul, 4294967295ul, 7ul,
2636928640ul, 15ul, 4022730752ul, 18ul, 1812433253ul>
>(std::mersenne_twister_engine<unsigned long, 32ul, 624ul, 397ul, 31ul,
2567483615ul, 11ul, 4294967295ul, 7ul, 2636928640ul, 15ul, 4022730752ul,
18ul, 1812433253ul>&) [/home/dael/projects/operating_sys/EX4/q4/main]

std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, :??? (0.01% ) 210
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> > >::_S_key(std::_Rb_tree_node<std::pair<int,
int> > const*) [/home/dael/projects/operating_sys/EX4/q4/main]

std::locale::facet::_S_get_c_locale() [/usr/lib/x86_64-linux-:??? (0.01% ) 210
gnu/libstdc++.so.6.0.33]

elf/../elf/dl-tls.c:_dl_allocate_tls_init [/usr/lib/x86_64-linux-/. (0.01% ) 209
gnu/ld-linux-x86-64.so.2]

std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, :??? (0.01% ) 209
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> >
>::_M_drop_node(std::_Rb_tree_node<std::pair<int, int> >*)
[/home/dael/projects/operating_sys/EX4/q4/main]

std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, :??? (0.01% ) 209
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> > >::_M_get_node()
[/home/dael/projects/operating_sys/EX4/q4/main]

operator new(unsigned long, void*) :??? (0.01% ) 208
[/home/dael/projects/operating_sys/EX4/q4/main]

std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, :??? (0.01% ) 206
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> > >::_M_erase(std::_Rb_tree_node<std::pair<int,
int> >*)'2 [/home/dael/projects/operating_sys/EX4/q4/main]

std::deque<int, std::allocator<int> >::push_back(int :??? (0.01% ) 204
const&) [/home/dael/projects/operating_sys/EX4/q4/main]

gnu_cxx::__aligned_membuf<std::pair<int, int> __:??? (0.01% ) 203
>::_M_addr() [/home/dael/projects/operating_sys/EX4/q4/main]

std::_Rb_tree_node<std::pair<int, int> >* :??? (0.01% ) 203
std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, std::_Identity<std::pair<int,
int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> >
>::_M_clone_node<false, std::_Rb_tree<std::pair<int, int>, std::pair<int, int>,
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> >
>::_Alloc_node>(std::_Rb_tree_node<std::pair<int, int> >*,
std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, std::_Identity<std::pair<int,
int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> >
>::_Alloc_node&) [/home/dael/projects/operating_sys/EX4/q4/main]

std::_Rb_tree_node<std::pair<int, int> >* :??? (0.01% ) 198
std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, std::_Identity<std::pair<int,
int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> >
>::_Alloc_node::operator()<std::pair<int, int> const&>(std::pair<int, int> const&)
const [/home/dael/projects/operating_sys/EX4/q4/main]

x00000000000e98b0 [/usr/lib/x86_64-linux-0:??? (0.01% ) 197
gnu/libstdc++.so.6.0.33]

std::_Rb_tree_node<std::pair<int, int> >* :??? (0.01% ) 195
std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> > >::_M_copy<false, std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> > >::_Alloc_node>(std::_Rb_tree_node<std::pair<int, int> >*, std::_Rb_tree_node_base*, std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> > >::_Alloc_node&) [/home/dael/projects/operating_sys/EX4/q4/main]

elf/./elf/dl-setup_hash.c:_dl_setup_hash [/usr/lib/x86_64-/. (0.01% ) 189 linux-gnu/ld-linux-x86-64.so.2]

bool std::operator< <int, int>(std::pair<int, int> const&, :??? (0.01% ) 189 std::pair<int, int> const&) [/home/dael/projects/operating_sys/EX4/q4/main]

std::_Rb_tree_node<std::pair<int, int> >* :??? (0.01% ) 188
std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> > >::_M_copy<false, std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> > >::_Alloc_node>(std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> > > const&, std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> > >::_Alloc_node&) [/home/dael/projects/operating_sys/EX4/q4/main]

elf/../sysdeps/unix/sysv/linux/dl-/. (0.01% ) 187 parse_auxv.h:_dl_sysdep_parse_arguments

libio/./libio/putc.c:putc [/usr/lib/x86_64-linux-gnu/libc.so.6]/. (0.01% ) 184

std::locale::operator=(std::locale const&) [/usr/lib/x86_64-:??? (0.01% ) 184 linux-gnu/libstdc++.so.6.0.33]

std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, :??? (0.01% ) 180 std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >, std::allocator<std::pair<int, int> > >::begin() const [/home/dael/projects/operating_sys/EX4/q4/main]

string/../sysdeps/x86_64/multiarch/strcmp-/. (0.01% ) 178 avx2.S:__strncmp_avx2 [/usr/lib/x86_64-linux-gnu/libc.so.6]

elf/../sysdeps/x86/cpu-features.c:update_active.constprop.0 /.  (0.01% ) 176
[/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

elf/../sysdeps/x86/cpu-/.  (0.01% ) 175
features.c:init_cpu_features.constprop.0 [/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

gnu_cxx::__aligned_membuf<std::pair<int, int> __:???  (0.01% ) 175
>::_M_addr() const [/home/dael/projects/operating_sys/EX4/q4/main]

[???] x00000000048ed3600:???  (0.01% ) 173

elf/./elf/dl-minimal-malloc.c:__minimal_calloc /.  (0.01% ) 170
[/usr/lib/x86_64-linux-gnu/ld-linux-x86-64.so.2]

libio/./libio/genops.c:_IO_cleanup [/usr/lib/x86_64-linux-/.  (0.01% ) 170
gnu/libc.so.6]

std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, :???  (0.01% ) 168
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> > >::_S_left(std::_Rb_tree_node_base*)
[/home/dael/projects/operating_sys/EX4/q4/main]

std::_Rb_tree_const_iterator<std::pair<int, int> :???  (0.01% ) 168
>::operator++() [/home/dael/projects/operating_sys/EX4/q4/main]

std::basic_ostream<char, std::char_traits<char> >& :???  (0.01% ) 168
std::endl<char, std::char_traits<char> >(std::basic_ostream<char,
std::char_traits<char> >&) [/usr/lib/x86_64-linux-gnu/libstdc++.so.6.0.33]

elf/./elf/dl-misc.c:_dl_higher_prime_number [/usr/lib/x86_64-/.  (0.01% ) 159
linux-gnu/ld-linux-x86-64.so.2]

libio/./libio/genops.c:_IO_flush_all [/usr/lib/x86_64-linux-/.  (0.01% ) 159
gnu/libc.so.6]

std::_Rb_tree<std::pair<int, int>, std::pair<int, int>, :???  (0.01% ) 159
std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int> >,
std::allocator<std::pair<int, int> > >::_Rb_tree(std::_Rb_tree<std::pair<int, int>,
std::pair<int, int>, std::_Identity<std::pair<int, int> >, std::less<std::pair<int, int>
>, std::allocator<std::pair<int, int> > > const&)
[/home/dael/projects/operating_sys/EX4/q4/main]

elf/./elf/dl-init.c:_dl_init [/usr/lib/x86_64-linux-gnu/ld-linux-/.  (0.01% ) 158
x86-64.so.2]

elf/../sysdeps/x86/dl-prop.h:_dl_process_pt_gnu_property/.  (0.01% ) 156

--------------------------------------------------------------------------------

:The following files chosen for auto-annotation could not be found

--------------------------------------------------------------------------------

elf/../bits/stdlib-bsearch.h/.

elf/../elf/dl-tls.c/.

elf/../sysdeps/generic/dl-new-hash.h/.

elf/../sysdeps/generic/dl-protected.h/.

elf/../sysdeps/generic/ldsodefs.h/.

elf/../sysdeps/nptl/dl-tls_init_tp.c/.

elf/../sysdeps/unix/sysv/linux/dl-parse_auxv.h/.

elf/../sysdeps/unix/sysv/linux/dl-sysdep.c/.

elf/../sysdeps/x86/cpu-features.c/.

elf/../sysdeps/x86/dl-cacheinfo.h/.

elf/../sysdeps/x86/dl-prop.h/.

elf/../sysdeps/x86_64/dl-machine.h/.

elf/../sysdeps/x86_64/dl-trampoline.h/.

elf/./dl-find_object.h/.

elf/./dl-map-segments.h/.

elf/./elf/dl-cache.c/.

elf/./elf/dl-call_fini.c/.

elf/./elf/dl-catch.c/.

elf/./elf/dl-deps.c/.

elf/./elf/dl-environ.c/.

elf/./elf/dl-find_object.c/.

elf/./elf/dl-fini.c/.

elf/./elf/dl-hwcaps.c/.

elf/./elf/dl-hwcaps_split.c/.

elf/./elf/dl-init.c/.

elf/./elf/dl-load.c/.

elf/./elf/dl-lookup-direct.c/.

elf/./elf/dl-lookup.c/.

elf/./elf/dl-minimal-malloc.c/.

elf/./elf/dl-minimal.c/.

elf/./elf/dl-misc.c/.

elf/./elf/dl-object.c/.

elf/./elf/dl-reloc.c/.

elf/./elf/dl-runtime.c/.

elf/./elf/dl-setup_hash.c/.

elf/./elf/dl-sort-maps.c/.

elf/./elf/dl-tunables.c/.

elf/./elf/dl-tunables.h/.

elf/./elf/dl-version.c/.

elf/./elf/do-rel.h/.

elf/./elf/get-dynamic-info.h/.

elf/./elf/libc-dl-profstub.c/.

elf/./elf/rtld.c/.

elf/./get-dynamic-info.h/.

iconv/./iconv/gconv_simple.c/.

io/../sysdeps/unix/sysv/linux/open64_nocancel.c/.

libio/./libio/fileops.c/.

libio/./libio/genops.c/.

libio/./libio/iofflush.c/.

libio/./libio/iofwrite.c/.

libio/./libio/libioP.h/.

libio/./libio/putc.c/.

malloc/./malloc/malloc.c/.

misc/../sysdeps/unix/sysv/linux/mmap64.c/.

posix/./posix/getopt.c/.

setjmp/../sysdeps/x86_64/setjmp.S/.

stdlib/../stdlib/strtol_l.c/.

stdlib/./stdlib/cxa_atexit.c/.

stdlib/./stdlib/cxa_finalize.c/.

stdlib/./stdlib/exit.c/.

stdlib/./stdlib/getenv.c/.

string/../string/strcspn.c/.

string/../sysdeps/x86_64/multiarch/../multiarch/memset-vec-unaligned-/.
erms.S

string/../sysdeps/x86_64/multiarch/../multiarch/strchr-sse2.S/.

string/../sysdeps/x86_64/multiarch/../multiarch/strcmp-sse2.S/.

string/../sysdeps/x86_64/multiarch/../multiarch/strlen-sse2.S/.

string/../sysdeps/x86_64/multiarch/memcmp-avx2-movbe.S/.

string/../sysdeps/x86_64/multiarch/memmove-vec-unaligned-erms.S/.

string/../sysdeps/x86_64/multiarch/strcmp-avx2.S/.

string/../sysdeps/x86_64/multiarch/strlen-avx2.S/.

wcsmbs/./wcsmbs/btowc.c/.

wcsmbs/./wcsmbs/wctob.c/.

wcsmbs/./wcsmbsload.h/.

wctype/./wctype/wctype_l.c/.