```
1: -----
  2: Command: ./EDistance 3: Massif arguments: (none)
  4: ms_print arguments: massif.out.4462
  6:
  7:
  8: GB
9: 3.455^
 10:
             :#
 11:
              @#
 12:
              :@#
 13:
             :::::
 14:
             @@# @:
  :
 15:
             :00# 0:
  :
 16:
             :00#:0:
 :
 17: |
            0:00#00:
  :
 18:
            0:00#00:
  :
 19:
          0:0:00#00:
  :
 20:
           0:0:00#00:
  :
 21:
          @@::@:@@#@@:
          00::0:00#00:
 22:
 23:
          00::0:00#00:
  :
      :00::0:00#00:
 24:
      ::00::0:00#00:
 25:
  •
     | :::@@::@:@@#@@:
 26:
  :
 27: | @:::@@::@:@@#@@:
      0:::00::0:00#00:
 28:
 29: 0 +-----
---->Gi
 30:
      0
28.47
 31:
 32: Number of snapshots: 70
 33: Detailed snapshots: [1, 2, 6, 21, 24, 34, 41, 46, 48 (peak), 56, 66]
 34:
 35: -----
 36:
    n time(i) total(B) useful-heap(B) extra-heap(B) sta
cks(B)
 37: -----
```

0

0

0

38: 0

0

valgrindOutput.txt Mon Apr 04 19:36:40 2022 1

```
\cap
                                                 58,445,802 10,390
   39: 1
             98,580,621
                              58,456,192
    Ω
   40: 99.98% (58,445,802B) (heap allocation functions) malloc/new/new[], --allo
c-fns, etc.
   41: ->74.32% (43,445,760B) 0x10C0CA: allocate (new_allocator.h:114)
   42: | ->74.32% (43,445,760B) 0x10C0CA: allocate (alloc_traits.h:133)
           ->74.32% (43,445,760B) 0x10C0CA: _M_allocate (stl_vector.h:343)
   43:
   44:
            ->74.32% (43,445,760B) 0x10C0CA: _M_create_storage (stl_vector.h:35
8)
   45:
               ->74.32% (43,445,760B) 0x10C0CA: _Vector_base (stl_vector.h:302)
                 ->74.32% (43,445,760B) 0x10C0CA: vector (stl_vector.h:552)
   47:
                  ->74.32% (43,445,760B) 0x10C0CA: _Construct<std::vector<int>,
 std::vector<int> > (stl_construct.h:83)
                    ->74.32% (43,445,760B) 0x10C0CA: __uninit_copy<std::vector<
   48:
int>*, std::vector<int>*> (stl_uninitialized.h:83)
   49: |
                      ->74.32% (43,445,760B) 0x10C0CA: uninitialized_copy<std::
vector<int>*, std::vector<int>*> (stl_uninitialized.h:140)
                        ->74.32% (43,445,760B) 0x10C0CA: __uninitialized_copy_a
   50:
<std::vector<int>*, std::vector<int>*, std::vector<int> > (stl_uninitialized.h:3
                           ->74.32% (43,445,760B) 0x10C0CA: __uninitialized_move
_if_noexcept_a<std::vector<int>*, std::vector<int>*, std::allocator<std::vector<
int> > > (stl_uninitialized.h:329)
                             ->74.32% (43,445,760B) 0x10C0CA: std::vector<std::v
ector<int, std::allocator<int> >, std::allocator<std::vector<int, std::allocator</pre>
<int> > > ::_M_realloc_insert(__gnu_cxx::__normal_iterator<std::vector<int, std</pre>
::allocator<int> >*, std::vector<std::vector<int, std::allocator<int> >, std::al
locator<std::vector<int, std::allocator<int> > > >, std::vector<int, std::allo</pre>
cator<int> > const&) (vector.tcc:474)
   53: |
                               ->74.32% (43,445,760B) 0x10BD3B: push_back (stl_v
ector.h:1195)
   54:
                                ->74.32% (43,445,760B) 0x10BD3B: EDistance::EDi
stance(std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<c</pre>
har> >, std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<
char> >) (EDistance.cpp:18)
                                  ->74.32\% (43,445,760B) 0x10A8F1: main (main.c
   55:
pp:25)
   56:
   57: ->24.58% (14,368,780B) 0x10BCC1: allocate (new_allocator.h:114)
   58: | ->24.58% (14,368,780B) 0x10BCC1: allocate (alloc_traits.h:133)
   59:
          ->24.58% (14,368,780B) 0x10BCC1: _M_allocate (stl_vector.h:343)
   60:
            ->24.58% (14,368,780B) 0x10BCC1: _M_create_storage (stl_vector.h:35
8)
   61:
               ->24.58% (14,368,780B) 0x10BCC1: _Vector_base (stl_vector.h:302)
                ->24.58% (14,368,780B) 0x10BCC1: vector (stl_vector.h:552)
   62:
                   ->24.58% (14,368,780B) 0x10BCC1: construct (new_allocator.h:1
   63:
59)
                     ->24.58% (14,368,780B) 0x10BCC1: construct<std::vector<int>
  (alloc_traits.h:140)
                       ->24.58% (14,368,780B) 0x10BCC1: push_back (stl_vector.h:
   65:
1189)
                         ->24.58% (14,368,780B) 0x10BCC1: EDistance::EDistance(s
td::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >,
std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >)
 (EDistance.cpp:18)
   67:
                          ->24.58% (14,368,780B) 0x10A8F1: main (main.cpp:25)
   68:
   69: ->01.08% (631,262B) in 7 places, all below massif's threshold (1.00%)
   71: ---
   72:
                time(i) total(B) useful-heap(B) extra-heap(B) sta
cks(B)
```

```
_____
   74: 2 259,963,811 132,970,768 132,947,218
                                                                  23,550
    Ω
   75: 99.98% (132,947,218B) (heap allocation functions) malloc/new/new[], --all
oc-fns, etc.
   76: ->55.99% (74,446,120B) 0x10C0CA: allocate (new_allocator.h:114)
   77: | ->55.99% (74,446,120B) 0x10C0CA: allocate (alloc_traits.h:133)
   78:
           ->55.99% (74,446,120B) 0x10C0CA: _M_allocate (stl_vector.h:343)
   79.
             ->55.99% (74,446,120B) 0x10C0CA: _M_create_storage (stl_vector.h:35
   80:
              ->55.99% (74,446,120B) 0x10C0CA: _Vector_base (stl_vector.h:302)
                 ->55.99% (74,446,120B) 0x10C0CA: vector (stl_vector.h:552)
   81:
   82:
                  ->55.99% (74,446,120B) 0x10C0CA: _Construct<std::vector<int>,
std::vector<int> > (stl_construct.h:83)
                    ->55.99% (74,446,120B) 0x10C0CA: __uninit_copy<std::vector<
   83:
int>*, std::vector<int>*> (stl_uninitialized.h:83)
   84: |
                      ->55.99% (74,446,120B) 0x10C0CA: uninitialized_copy<std::
vector<int>*, std::vector<int>*> (stl_uninitialized.h:140)
                        ->55.99% (74,446,120B) 0x10C0CA: __uninitialized_copy_a
   85:
<std::vector<int>*, std::vector<int>*, std::vector<int> > (stl_uninitialized.h:3
                           ->55.99% (74,446,120B) 0x10C0CA: __uninitialized_move
_if_noexcept_a<std::vector<int>*, std::vector<int>*, std::allocator<std::vector<
int> > > (stl_uninitialized.h:329)
   87:
                            ->55.99% (74,446,120B) 0x10C0CA: std::vector<std::v
ector<int, std::allocator<int> >, std::allocator<std::vector<int, std::allocator</pre>
<int> > > ::_M_realloc_insert(__gnu_cxx::__normal_iterator<std::vector<int, std</pre>
::allocator<int> >*, std::vector<std::vector<int, std::allocator<int> >, std::al
locator<std::vector<int, std::allocator<int> > > >, std::vector<int, std::allo</pre>
cator<int> > const&) (vector.tcc:474)
   88: |
                              ->55.99% (74,446,120B) 0x10BD3B: push_back (stl_v
ector.h:1195)
   89:
                                ->55.99% (74,446,120B) 0x10BD3B: EDistance::EDi
stance(std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<c</pre>
har> >, std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<
char> >) (EDistance.cpp:18)
                                  ->55.99% (74,446,120B) 0x10A8F1: main (main.c
  90:
pp:25)
   91:
   92: ->43.48% (57,814,540B) 0x10BCC1: allocate (new_allocator.h:114)
   93: | ->43.48% (57,814,540B) 0x10BCC1: allocate (alloc_traits.h:133)
   94:
          ->43.48% (57,814,540B) 0x10BCC1: _M_allocate (stl_vector.h:343)
   95:
            ->43.48% (57,814,540B) 0x10BCC1: _M_create_storage (stl_vector.h:35
8)
   96:
              ->43.48% (57,814,540B) 0x10BCC1: _Vector_base (stl_vector.h:302)
                ->43.48% (57,814,540B) 0x10BCC1: vector (stl_vector.h:552)
   97:
   98:
                   ->43.48% (57,814,540B) 0x10BCC1: construct (new_allocator.h:1
                     ->43.48% (57,814,540B) 0x10BCC1: construct<std::vector<int>
> (alloc_traits.h:140)
  100:
                       ->43.48% (57,814,540B) 0x10BCC1: push_back (stl_vector.h:
1189)
                        ->43.48% (57,814,540B) 0x10BCC1: EDistance::EDistance(s
td::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >,
std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >)
 (EDistance.cpp:18)
 102:
                          ->43.48% (57,814,540B) 0x10A8F1: main (main.cpp:25)
  103:
  104: ->00.52% (686,558B) in 1+ places, all below ms_print's threshold (01.00%)
  106: ---
  107:
            time(i) total(B) useful-heap(B) extra-heap(B) sta
cks(B)
```

```
_____
  109:
         3
              383,306,690
                               140,301,584
                                                140,276,742
                                                                   24,842
     Ω
  110:
              478,424,756
                               235, 454, 296
                                                235,412,646
                                                                   41,650
     Ω
                               327,792,856
                                                                   57,970
  111:
         5
              570,818,804
                                                327,734,886
     0
                               437,444,896
  112:
              680,536,736
                                                437,367,546
                                                                    77,350
     0
  113: 99.98% (437,367,546B) (heap allocation functions) malloc/new/new[], --all
oc-fns, etc.
  114: ->73.35% (320,865,040B) 0x10C0CA: allocate (new_allocator.h:114)
       ->73.35% (320,865,040B) 0x10C0CA: allocate (alloc_traits.h:133)
           ->73.35% (320,865,040B) 0x10C0CA: _M_allocate (stl_vector.h:343)
  116:
             ->73.35% (320,865,040B) 0x10C0CA: _M_create_storage (stl_vector.h:3
  117:
58)
               ->73.35% (320,865,040B) 0x10C0CA: _Vector_base (stl_vector.h:302)
  118:
                 ->73.35% (320,865,040B) 0x10C0CA: vector (stl_vector.h:552)
  119:
  120:
                   ->73.35% (320,865,040B) 0x10C0CA: _Construct<std::vector<int>
, std::vector<int> > (stl_construct.h:83)
  121:
                     ->73.35% (320,865,040B) 0x10C0CA: __uninit_copy<std::vector
<int>*, std::vector<int>*> (stl_uninitialized.h:83)
  122:
                       ->73.35% (320,865,040B) 0x10C0CA: uninitialized_copy<std:
:vector<int>*, std::vector<int>*> (stl_uninitialized.h:140)
                         ->73.35% (320,865,040B) 0x10C0CA: __uninitialized_copy_
a<std::vector<int>*, std::vector<int>*, std::vector<int> > (stl_uninitialized.h:
307)
                           ->73.35% (320,865,040B) 0x10C0CA: __uninitialized_mov
  124:
e_if_noexcept_a<std::vector<int>*, std::vector<int>*, std::allocator<std::vector</pre>
<int> > > (stl_uninitialized.h:329)
  125:
                             ->73.35% (320,865,040B) 0x10C0CA: std::vector<std::
vector<int, std::allocator<int> >, std::allocator<std::vector<int, std::allocato</pre>
r<int> > >::_M_realloc_insert(__gnu_cxx::__normal_iterator<std::vector<int, st
d::allocator<int> >*, std::vector<std::vector<int, std::allocator<int> >, std::a
llocator<std::vector<int, std::allocator<int> > > >, std::vector<int, std::all</pre>
ocator<int> > const&) (vector.tcc:474)
  126:
                               ->73.35% (320,865,040B) 0x10BD3B: push_back (stl_
vector.h:1195)
                                 ->73.35% (320,865,040B) 0x10BD3B: EDistance::ED
  127:
istance(std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<
char> >, std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator
<char> >) (EDistance.cpp:18)
  128:
                                   ->73.35\% (320,865,040B) 0x10A8F1: main (main.
cpp:25)
  129:
  130: ->26.46% (115,742,220B) 0x10BCC1: allocate (new_allocator.h:114)
  131: | ->26.46% (115,742,220B) 0x10BCC1: allocate (alloc_traits.h:133)
           ->26.46% (115,742,220B) 0x10BCC1: _M_allocate (stl_vector.h:343)
  133:
             ->26.46% (115,742,220B) 0x10BCC1: _M_create_storage (stl_vector.h:3
58)
  134:
               ->26.46% (115,742,220B) 0x10BCC1: _Vector_base (stl_vector.h:302)
  135:
                 ->26.46% (115,742,220B) 0x10BCC1: vector (stl_vector.h:552)
  136:
                   ->26.46% (115,742,220B) 0x10BCC1: construct (new_allocator.h:
159)
  137:
                     ->26.46% (115,742,220B) 0x10BCC1: construct<std::vector<int
> > (alloc_traits.h:140)
                       ->26.46% (115,742,220B) 0x10BCC1: push_back (stl_vector.h
  138:
:1189)
                         ->26.46% (115,742,220B) 0x10BCC1: EDistance::EDistance(
std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >,
std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >
) (EDistance.cpp:18)
  140:
                           ->26.46% (115,742,220B) 0x10A8F1: main (main.cpp:25)
  141:
  142: ->00.17% (760,286B) in 1+ places, all below ms_print's threshold (01.00%)
```

143:

```
144: -----
 145:
              time(i) total(B) useful-heap(B) extra-heap(B)
cks(B)
 146: -----
        7 819,547,159 344,491,376 344,430,454 60,922
  147:
    0
      8 941,841,941
                          466,900,792 466,818,262 82,530
  148:
    0
       9 1,024,271,925
  149:
                           549,281,272
                                        549,184,182
                                                          97,090
    0
       10 1,106,701,909
                          631,661,752 631,550,102 111,650
  150:
    0
  151:
       11 1,189,131,893
                          714,042,232 713,916,022
                                                         126,210
    Ω
  152:
      12 1,343,121,973
                          867,939,832
                                         867,786,422
                                                         153,410
    Ω
                                         521,479,718
  153: 13 1,460,573,656
                          521,571,920
                                                          92,202
    0
                          674,564,240
                                         674,444,998
  154: 14 1,613,668,728
                                                         119,242
    0
  155: 15 1,766,763,800
                          827,556,560
                                         827,410,278
                                                         146,282
    0
  156: 16 1,881,584,126
                          942,694,024
                                         942,527,454
                                                         166,570
    0
  157: 17 2,035,574,206
                         1,096,591,624
                                        1,096,397,854
                                                         193,770
    Ω
  158: 18 2,131,818,006
                         1,192,777,624
                                        1,192,566,854
                                                         210,770
    0
  159: 19 2,255,010,070
                         1,315,895,704
                                        1,315,663,174
                                                         232,530
    0
  160:
      20 2,378,202,134
                         1,439,013,784
                                        1,438,759,494
                                                         254,290
    0
  161:
      21 2,501,394,198
                         1,562,131,864
                                        1,561,855,814
                                                         276,050
    0
  162: 99.98% (1,561,855,814B) (heap allocation functions) malloc/new/new[], --a
lloc-fns, etc.
 163: ->70.25% (1,097,344,860B) 0x10C0CA: allocate (new_allocator.h:114)
 164: ->70.25% (1,097,344,860B) 0x10C0CA: allocate (alloc_traits.h:133)
         ->70.25% (1,097,344,860B) 0x10C0CA: _M_allocate (stl_vector.h:343)
 165:
 166:
           ->70.25% (1,097,344,860B) 0x10C0CA: _M_create_storage (stl_vector.h
:358)
 167:
            ->70.25% (1,097,344,860B) 0x10C0CA: _Vector_base (stl_vector.h:30
              ->70.25% (1,097,344,860B) 0x10C0CA: vector (stl_vector.h:552)
 168:
                ->70.25% (1,097,344,860B) 0x10C0CA: _Construct<std::vector<in
t>, std::vector<int> > (stl_construct.h:83)
          ->70.25% (1,097,344,860B) 0x10C0CA: __uninit_copy<std::vect
or<int>*, std::vector<int>*> (stl_uninitialized.h:83)
                   ->70.25% (1,097,344,860B) 0x10C0CA: uninitialized_copy<st
d::vector<int>*, std::vector<int>*> (stl_uninitialized.h:140)
                     ->70.25% (1,097,344,860B) 0x10C0CA: __uninitialized_cop
y_a<std::vector<int>*, std::vector<int>*, std::vector<int> > (stl_uninitialized.
h:307)
 173: |
                       ->70.25% (1,097,344,860B) 0x10C0CA: __uninitialized_m
ove_if_noexcept_a<std::vector<int>*, std::vector<int>*, std::allocator<std::vect</pre>
or<int> > > (stl_uninitialized.h:329)
                         ->70.25% (1,097,344,860B) 0x10C0CA: std::vector<std
 174:
::vector<int, std::allocator<int> >, std::allocator<std::vector<int, std::alloca
tor<int> > > ::_M_realloc_insert(__gnu_cxx::__normal_iterator<std::vector<int,</pre>
std::allocator<int> >*, std::vector<std::vector<int, std::allocator<int> >, std:
:allocator<std::vector<int, std::allocator<int> > > >, std::vector<int, std::a
llocator<int> > const&) (vector.tcc:474)
```

```
203: | ->74.94% (1,390,264,320B) 0x10C0CA: _M_create_storage (stl_vector.h :358)
204: | ->74.94% (1,390,264,320B) 0x10C0CA: _Vector_base (stl_vector.h:30
2)
205: | ->74.94% (1,390,264,320B) 0x10C0CA: vector (stl_vector.h:552)
206: | ->74.94% (1,390,264,320B) 0x10C0CA: _Construct<std::vector<int>, std::vector<int> > (stl_construct.h:83)
207: | ->74.94% (1,390,264,320B) 0x10C0CA: __uninit_copy<std::vector<int>*, std::vector<int>*> (stl_uninitialized.h:83)
208: | ->74.94% (1,390,264,320B) 0x10C0CA: uninitialized_copy<std::vector<int>*, std::vector<int>*> (stl_uninitialized.h:140)
209: | ->74.94% (1,390,264,320B) 0x10C0CA: _uninitialized_cop
y_a<std::vector<int>*, std::vector<int>*, std::vector<int> > (stl_uninitialized.h:307)
210: | ->74.94% (1,390,264,320B) 0x10C0CA: _uninitialized_m
ove_if_noexcept_a<std::vector<int>*, std::vector<int>*, std::vector<int>*, std::vector<std::vector<int>*, std::vector<int>*, std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<std::vector<
```

or<int> > > (stl_uninitialized.h:329)

```
->74.94% (1,390,264,320B) 0x10C0CA: std::vector<std
  211:
::vector<int, std::allocator<int> >, std::allocator<std::vector<int, std::alloca
tor<int> > > :: _M_realloc_insert(__gnu_cxx::__normal_iterator<std::vector<int,
std::allocator<int> >*, std::vector<std::vector<int, std::allocator<int> >, std:
:allocator<std::vector<int, std::allocator<int> > > >, std::vector<int, std::a</pre>
llocator<int> > const&) (vector.tcc:474)
  212: |
                             ->74.94% (1,390,264,320B) 0x10BD3B: push_back (st
l_vector.h:1195)
  213: |
                                ->74.94% (1,390,264,320B) 0x10BD3B: EDistance::
EDistance(std::__cxx11::basic_string<char, std::char_traits<char>, std::allocato
r<char> >, std::__cxx11::basic_string<char, std::char_traits<char>, std::allocat
or<char> >) (EDistance.cpp:18)
  214:
                                  ->74.94% (1,390,264,320B) 0x10A8F1: main (mai
n.cpp:25)
  215:
  216: ->24.97% (463,308,300B) 0x10BCC1: allocate (new_allocator.h:114)
  217: | ->24.97% (463,308,300B) 0x10BCC1: allocate (alloc_traits.h:133)
          ->24.97% (463,308,300B) 0x10BCC1: _M_allocate (stl_vector.h:343)
  218:
  219:
            ->24.97% (463,308,300B) 0x10BCC1: _M_create_storage (stl_vector.h:3
58)
  220:
              ->24.97% (463,308,300B) 0x10BCC1: _Vector_base (stl_vector.h:302)
                ->24.97% (463,308,300B) 0x10BCC1: vector (stl_vector.h:552)
  221:
  222:
                  ->24.97% (463,308,300B) 0x10BCC1: construct (new_allocator.h:
  223:
                    ->24.97% (463,308,300B) 0x10BCC1: construct<std::vector<int
> > (alloc_traits.h:140)
  224:
                      ->24.97% (463,308,300B) 0x10BCC1: push_back (stl_vector.h
:1189)
  225:
                       ->24.97% (463,308,300B) 0x10BCC1: EDistance::EDistance(
std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >,
std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >
) (EDistance.cpp:18)
  226:
                          ->24.97% (463,308,300B) 0x10A8F1: main (main.cpp:25)
  227:
  228: ->00.06% (1,202,654B) in 1+ places, all below ms_print's threshold (01.00
  229:
  230: --
                time(i)
                               total(B) useful-heap(B) extra-heap(B)
  231:
                                                                          sta
cks(B)
  232: ---
  233: 25 2,887,115,609
                           1,020,125,168
                                            1,019,944,886
                                                               180,282
    0
  234:
       26 3,010,316,377
                           1,143,243,248
                                            1,143,041,206
                                                               202,042
    0
  235:
       27 3,133,517,145
                           1,266,361,328
                                            1,266,137,526
                                                               223,802
    0
  236:
       28 3,256,717,913
                           1,389,479,408
                                            1,389,233,846
                                                                245,562
    0
  237:
       29 3,379,918,681
                           1,512,597,488
                                            1,512,330,166
                                                                267,322
    Ω
       30 3,503,119,449
  238:
                           1,635,715,568
                                            1,635,426,486
                                                                289,082
    Ω
  239:
       31 3,657,120,409
                           1,789,613,168
                                            1,789,296,886
                                                                316,282
    0
  240:
       32 3,820,513,047
                           1,953,689,488
                                            1,953,344,338
                                                               345,150
    0
       33 3,984,014,279
                           2,117,092,528 2,116,718,498
  241:
                                                               374,030
    0
       34 4,147,515,511 2,280,495,568 2,280,092,658 402,910
  242:
```

243: 99.98% (2,280,092,658B) (heap allocation functions) malloc/new/new[], --a lloc-fns, etc.

```
244: ->59.27% (1,351,570,440B) 0x10C0CA: allocate (new_allocator.h:114)
  245: ->59.27% (1,351,570,440B) 0x10C0CA: allocate (alloc_traits.h:133)
          ->59.27% (1,351,570,440B) 0x10C0CA: _M_allocate (stl_vector.h:343)
  246:
  247: |
            ->59.27% (1,351,570,440B) 0x10C0CA: _M_create_storage (stl_vector.h
:358)
  248:
             ->59.27% (1,351,570,440B) 0x10C0CA: _Vector_base (stl_vector.h:30
2.)
                ->59.27% (1,351,570,440B) 0x10C0CA: vector (stl_vector.h:552)
  249:
  250:
                  ->59.27% (1,351,570,440B) 0x10C0CA: _Construct<std::vector<in
t>, std::vector<int> > (stl_construct.h:83)
  251: | ->59.27% (1,351,570,440B) 0x10C0CA: __uninit_copy<std::vect
or<int>*, std::vector<int>*> (stl_uninitialized.h:83)
                      ->59.27% (1,351,570,440B) 0x10C0CA: uninitialized_copy<st
d::vector<int>*, std::vector<int>*> (stl_uninitialized.h:140)
253: | ->59.27% (1,351,570,440B) 0x10C0CA: __uninitialized_cop y_a<std::vector<int>*, std::vector<int> > (stl_uninitialized.
h:307)
  254:
                           ->59.27% (1,351,570,440B) 0x10C0CA: __uninitialized_m
ove_if_noexcept_a<std::vector<int>*, std::vector<int>*, std::allocator<std::vect
or<int> > > (stl_uninitialized.h:329)
  255:
                             ->59.27% (1,351,570,440B) 0x10C0CA: std::vector<std
::vector<int, std::allocator<int> >, std::allocator<std::vector<int, std::alloca
tor<int> > > ::_M_realloc_insert(__gnu_cxx::__normal_iterator<std::vector<int,</pre>
std::allocator<int> >*, std::vector<std::vector<int, std::allocator<int> >, std:
:allocator<std::vector<int, std::allocator<int> > > >, std::vector<int, std::a</pre>
llocator<int> > const&) (vector.tcc:474)
  256:
                               ->59.27% (1,351,570,440B) 0x10BD3B: push_back (st
l_vector.h:1195)
                                 ->59.27% (1,351,570,440B) 0x10BD3B: EDistance::
  257:
EDistance(std::__cxx11::basic_string<char, std::char_traits<char>, std::allocato
r<char> >, std::__cxx11::basic_string<char, std::char_traits<char>, std::allocat
or<char> >) (EDistance.cpp:18)
  258:
                                   ->59.27% (1,351,570,440B) 0x10A8F1: main (mai
n.cpp:25)
  259:
  260: ->40.64% (926,729,740B) 0x10BCC1: allocate (new_allocator.h:114)
       ->40.64% (926,729,740B) 0x10BCC1: allocate (alloc_traits.h:133)
  262:
           ->40.64% (926,729,740B) 0x10BCC1: _M_allocate (stl_vector.h:343)
  263:
            ->40.64% (926,729,740B) 0x10BCC1: _M_create_storage (stl_vector.h:3
58)
  264:
              ->40.64% (926,729,740B) 0x10BCC1: _Vector_base (stl_vector.h:302)
                ->40.64% (926,729,740B) 0x10BCC1: vector (stl_vector.h:552)
  265:
  266: |
                   ->40.64% (926,729,740B) 0x10BCC1: construct (new_allocator.h:
159)
                     ->40.64% (926,729,740B) 0x10BCC1: construct<std::vector<int
> > (alloc_traits.h:140)
  268:
                       ->40.64% (926,729,740B) 0x10BCC1: push_back (stl_vector.h
:1189)
                         ->40.64% (926,729,740B) 0x10BCC1: EDistance::EDistance(
std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >,
 std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >
) (EDistance.cpp:18)
  270:
                          ->40.64% (926,729,740B) 0x10A8F1: main (main.cpp:25)
  271:
  272: ->00.08% (1,792,478B) in 1+ places, all below ms_print's threshold (01.00
응)
  273:
  274: ----
       n time(i) total(B) useful-heap(B) extra-heap(B) sta
  275:
cks(B)
  277: 35 4,311,016,743 2,443,898,608 2,443,466,818 431,790
   Ω
```

```
valgrindOutput.txt
                         Mon Apr 04 19:36:40 2022
        36 4,474,517,975
  278:
                             2,607,301,648
                                              2,606,840,978
                                                                  460,670
     0
  279:
        37 4,638,019,207
                             2,770,704,688
                                              2,770,215,138
                                                                  489,550
     0
  280:
        38 4,719,769,823
                             2,852,406,208
                                              2,851,902,218
                                                                  503,990
     0
  281:
        39 4,801,520,439
                             2,934,107,728
                                              2,933,589,298
                                                                  518,430
     0
  282:
        40 4,883,271,055
                            3,015,809,248
                                              3,015,276,378
                                                                  532,870
     0
  283:
        41 4,965,021,671 3,097,510,768
                                              3,096,963,458
                                                                  547,310
     0
  284: 99.98% (3,096,963,458B) (heap allocation functions) malloc/new/new[], --a
lloc-fns, etc.
  285: ->70.01% (2,168,441,240B) 0x10C0CA: allocate (new_allocator.h:114)
  286: | ->70.01% (2,168,441,240B) 0x10C0CA: allocate (alloc_traits.h:133)
           ->70.01% (2,168,441,240B) 0x10C0CA: _M_allocate (stl_vector.h:343)
  287:
  288:
             ->70.01% (2,168,441,240B) 0x10C0CA: _M_create_storage (stl_vector.h
:358)
  289:
              ->70.01% (2,168,441,240B) 0x10C0CA: _Vector_base (stl_vector.h:30
2)
  290:
                 ->70.01% (2,168,441,240B) 0x10C0CA: vector (stl_vector.h:552)
                   ->70.01% (2,168,441,240B) 0x10C0CA: _Construct<std::vector<in
t>, std::vector<int> > (stl_construct.h:83)
  292:
                     ->70.01% (2,168,441,240B) 0x10C0CA: __uninit_copy<std::vect
or<int>*, std::vector<int>*> (stl_uninitialized.h:83)
                       ->70.01% (2,168,441,240B) 0x10C0CA: uninitialized_copy<st
d::vector<int>*, std::vector<int>*> (stl_uninitialized.h:140)
                         ->70.01% (2,168,441,240B) 0x10C0CA: __uninitialized_cop
y_a<std::vector<int>*, std::vector<int>*, std::vector<int> > (stl_uninitialized.
h:307)
  295: |
                           ->70.01% (2,168,441,240B) 0x10C0CA: __uninitialized_m
ove_if_noexcept_a<std::vector<int>*, std::vector<int>*, std::allocator<std::vect</pre>
or<int> > > (stl_uninitialized.h:329)
                             ->70.01% (2,168,441,240B) 0x10C0CA: std::vector<std
  296:
::vector<int, std::allocator<int> >, std::allocator<std::vector<int, std::alloca
tor<int> > > ::_M_realloc_insert(__gnu_cxx::__normal_iterator<std::vector<int,</pre>
std::allocator<int> >*, std::vector<std::vector<int, std::allocator<int> >, std:
:allocator<std::vector<int, std::allocator<int> > > >, std::vector<int, std::a
llocator<int> > const&) (vector.tcc:474)
                               ->70.01% (2,168,441,240B) 0x10BD3B: push_back (st
  297:
l_vector.h:1195)
                                 ->70.01% (2,168,441,240B) 0x10BD3B: EDistance::
  298:
EDistance(std::__cxx11::basic_string<char, std::char_traits<char>, std::allocato
r<char> >, std::__cxx11::basic_string<char, std::char_traits<char>, std::allocat
or<char> >) (EDistance.cpp:18)
                                   ->70.01\% (2,168,441,240B) 0x10A8F1: main (mai
  299:
n.cpp:25)
  301: ->29.92% (926,729,740B) 0x10BCC1: allocate (new_allocator.h:114)
  302: | ->29.92% (926,729,740B) 0x10BCC1: allocate (alloc_traits.h:133)
  303:
           ->29.92% (926,729,740B) 0x10BCC1: _M_allocate (stl_vector.h:343)
  304: I
             ->29.92% (926,729,740B) 0x10BCC1: _M_create_storage (stl_vector.h:3
58)
  305:
               ->29.92% (926,729,740B) 0x10BCC1: _Vector_base (stl_vector.h:302)
                 ->29.92% (926,729,740B) 0x10BCC1: vector (stl_vector.h:552)
  306:
  307:
                   ->29.92% (926,729,740B) 0x10BCC1: construct (new_allocator.h:
159)
  308:
                     ->29.92% (926,729,740B) 0x10BCC1: construct<std::vector<int
> > (alloc_traits.h:140)
  309:
                       ->29.92% (926,729,740B) 0x10BCC1: push_back (stl_vector.h
:1189)
  310:
                         ->29.92% (926,729,740B) 0x10BCC1: EDistance::EDistance(
std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >,
 std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >
```

```
) (EDistance.cpp:18)
                         ->29.92% (926,729,740B) 0x10A8F1: main (main.cpp:25)
  311:
  312: |
  313: ->00.06% (1,792,478B) in 1+ places, all below ms_print's threshold (01.00
  314:
  315: ---
       n time(i) total(B) useful-heap(B) extra-heap(B) sta
  316:
cks(B)
  317:
  318: 42 5,046,772,287 3,179,212,288 3,178,650,538 561,750
   0
  319: 43 5,128,522,903 3,260,913,808 3,260,337,618
                                                               576,190
    Ω
  320: 44 5,210,273,519
                           3,342,615,328 3,342,024,698
                                                               590,630
    Ω
  321: 45 5,292,024,135 3,424,316,848 3,423,711,778
                                                               605,070
    Ω
  322: 46 5,373,774,751 3,506,018,368 3,505,398,858
                                                               619,510
    0
  323: 99.98% (3,505,398,858B) (heap allocation functions) malloc/new/new[], --a
  324: ->73.50% (2,576,876,640B) 0x10C0CA: allocate (new_allocator.h:114)
  325: | ->73.50% (2,576,876,640B) 0x10C0CA: allocate (alloc_traits.h:133)
          ->73.50% (2,576,876,640B) 0x10C0CA: _M_allocate (stl_vector.h:343)
           ->73.50% (2,576,876,640B) 0x10C0CA: _M_create_storage (stl_vector.h
  327:
:358)
  328:
             ->73.50% (2,576,876,640B) 0x10C0CA: _Vector_base (stl_vector.h:30
2)
  329:
               ->73.50% (2,576,876,640B) 0x10C0CA: vector (stl_vector.h:552)
  330:
                 ->73.50% (2,576,876,640B) 0x10C0CA: _Construct<std::vector<in
t>, std::vector<int> > (stl_construct.h:83)
  331:
                    ->73.50% (2,576,876,640B) 0x10C0CA: __uninit_copy<std::vect
or<int>*, std::vector<int>*> (stl_uninitialized.h:83)
                     ->73.50% (2,576,876,640B) 0x10C0CA: uninitialized_copy<st
d::vector<int>*, std::vector<int>*> (stl_uninitialized.h:140)
                       ->73.50% (2,576,876,640B) 0x10C0CA: __uninitialized_cop
y_a<std::vector<int>*, std::vector<int>*, std::vector<int> > (stl_uninitialized.
h:307)
  334:
                         ->73.50% (2,576,876,640B) 0x10C0CA: __uninitialized_m
ove_if_noexcept_a<std::vector<int>*, std::vector<int>*, std::allocator<std::vect</pre>
or<int> > > (stl_uninitialized.h:329)
  335:
                           ->73.50% (2,576,876,640B) 0x10C0CA: std::vector<std
::vector<int, std::allocator<int> >, std::allocator<std::vector<int, std::alloca
tor<int> >> >::_M_realloc_insert(__gnu_cxx::__normal_iterator<std::vector<int,</pre>
std::allocator<int> >*, std::vector<std::vector<int, std::allocator<int> >, std:
:allocator<std::vector<int, std::allocator<int> > > >, std::vector<int, std::a</pre>
llocator<int> > const&) (vector.tcc:474)
  336: |
                              ->73.50% (2,576,876,640B) 0x10BD3B: push_back (st
l_vector.h:1195)
  337:
                                ->73.50% (2,576,876,640B) 0x10BD3B: EDistance::
EDistance(std::__cxx11::basic_string<char, std::char_traits<char>, std::allocato
r<char> >, std::__cxx11::basic_string<char, std::char_traits<char>, std::allocat
or<char> >) (EDistance.cpp:18)
                                  ->73.50% (2,576,876,640B) 0x10A8F1: main (mai
  338:
n.cpp:25)
  339:
  340: ->26.43% (926,729,740B) 0x10BCC1: allocate (new_allocator.h:114)
       ->26.43% (926,729,740B) 0x10BCC1: allocate (alloc_traits.h:133)
  341:
          ->26.43% (926,729,740B) 0x10BCC1: _M_allocate (stl_vector.h:343)
  342:
  343:
            ->26.43% (926,729,740B) 0x10BCC1: _M_create_storage (stl_vector.h:3
58)
  344: ->26.43% (926,729,740B) 0x10BCC1: _Vector_base (stl_vector.h:302)
```

```
valgrindOutput.txt
                       Mon Apr 04 19:36:40 2022
  345:
                ->26.43% (926,729,740B) 0x10BCC1: vector (stl_vector.h:552)
  346:
                 ->26.43% (926,729,740B) 0x10BCC1: construct (new_allocator.h:
159)
                    ->26.43% (926,729,740B) 0x10BCC1: construct<std::vector<int
  347:
> > (alloc_traits.h:140)
                     ->26.43% (926,729,740B) 0x10BCC1: push_back (stl_vector.h
  348:
:1189)
  349:
                       ->26.43% (926,729,740B) 0x10BCC1: EDistance::EDistance(
std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >,
std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >
) (EDistance.cpp:18)
  350:
                         ->26.43% (926,729,740B) 0x10A8F1: main (main.cpp:25)
  351:
  352: ->00.05% (1,792,478B) in 1+ places, all below ms_print's threshold (01.00
응)
  353:
  354: -----
  355: n time(i) total(B) useful-heap(B) extra-heap(B) sta
cks(B)
  356: -----
  357: 47 5,455,525,367 3,587,719,888 3,587,085,938 633,950
    0
  358: 48 5,577,698,383 3,709,706,368 3,709,050,858
                                                             655,510
    0
  359: 99.98% (3,709,050,858B) (heap allocation functions) malloc/new/new[], --a
lloc-fns, etc.
  360: ->74.95% (2,780,528,640B) 0x10C0CA: allocate (new_allocator.h:114)
  361: ->74.95% (2,780,528,640B) 0x10C0CA: allocate (alloc_traits.h:133)
          ->74.95% (2,780,528,640B) 0x10C0CA: _M_allocate (stl_vector.h:343)
  362:
  363: |
           ->74.95% (2,780,528,640B) 0x10C0CA: _M_create_storage (stl_vector.h
:358)
  364:
             ->74.95% (2,780,528,640B) 0x10C0CA: _Vector_base (stl_vector.h:30
2)
  365:
                ->74.95% (2,780,528,640B) 0x10C0CA: vector (stl_vector.h:552)
                 ->74.95% (2,780,528,640B) 0x10C0CA: _Construct<std::vector<in
t>, std::vector<int> > (stl_construct.h:83)
                   ->74.95% (2,780,528,640B) 0x10C0CA: __uninit_copy<std::vect
  367:
or<int>*, std::vector<int>*> (stl_uninitialized.h:83)
  368:
                     ->74.95% (2,780,528,640B) 0x10C0CA: uninitialized_copy<st
d::vector<int>*, std::vector<int>*> (stl_uninitialized.h:140)
                      ->74.95% (2,780,528,640B) 0x10C0CA: _
                                                           _uninitialized_cop
y_a<std::vector<int>*, std::vector<int>*, std::vector<int> > (stl_uninitialized.
h:307)
  370:
                         ->74.95% (2,780,528,640B) 0x10C0CA: __uninitialized_m
ove_if_noexcept_a<std::vector<int>*, std::vector<int>*, std::allocator<std::vect</pre>
or<int> > > (stl_uninitialized.h:329)
  371:
                           ->74.95% (2,780,528,640B) 0x10C0CA: std::vector<std
::vector<int, std::allocator<int> >, std::allocator<std::vector<int, std::alloca
tor<int> > > ::_M_realloc_insert(__gnu_cxx::__normal_iterator<std::vector<int,</pre>
std::allocator<int> >*, std::vector<std::vector<int, std::allocator<int> >, std:
:allocator<std::vector<int, std::allocator<int> > > >, std::vector<int, std::a
llocator<int> > const&) (vector.tcc:474)
  372: |
                            ->74.95% (2,780,528,640B) 0x10BD3B: push_back (st
l_vector.h:1195)
  373:
                               ->74.95% (2,780,528,640B) 0x10BD3B: EDistance::
EDistance(std::__cxx11::basic_string<char, std::char_traits<char>, std::allocato
r<char> >, std::__cxx11::basic_string<char, std::char_traits<char>, std::allocat
or<char> >) (EDistance.cpp:18)
                                 ->74.95\% (2,780,528,640B) 0x10A8F1: main (mai
  374:
n.cpp:25)
  375:
  376: ->24.98% (926,729,740B) 0x10BCC1: allocate (new_allocator.h:114)
```

377: | ->24.98% (926,729,740B) 0x10BCC1: allocate (alloc_traits.h:133)

y_a<std::vector<int>*, std::vector<int>*, std::vector<int> > (stl_uninitialized.

->76.98% (1,853,685,760B) 0x10C0CA: __uninitialized_cop

d::vector<int>*, std::vector<int>*> (stl_uninitialized.h:140)

411:

h:307)

```
::vector<int, std::allocator<int> >, std::allocator<std::vector<int, std::alloca
tor<int> > > ::_M_realloc_insert(__gnu_cxx::__normal_iterator<std::vector<int,</pre>
std::allocator<int> >*, std::vector<std::vector<int, std::allocator<int> >, std:
:allocator<std::vector<int, std::allocator<int> > > >, std::vector<int, std::a</pre>
llocator<int> > const&) (vector.tcc:474)
  414: |
                             ->76.98% (1,853,685,760B) 0x10BD3B: push_back (st
l_vector.h:1195)
  415:
                               ->76.98% (1,853,685,760B) 0x10BD3B: EDistance::
EDistance(std::__cxx11::basic_string<char, std::char_traits<char>, std::allocato
r<char> >, std::__cxx11::basic_string<char, std::char_traits<char>, std::allocat
or<char> >) (EDistance.cpp:18)
                                 ->76.98\% (1,853,685,760B) 0x10A8F1: main (mai
  416:
n.cpp:25)
  417:
  418: ->22.95% (552,575,760B) 0x10BCC1: allocate (new_allocator.h:114)
  419: | ->22.95% (552,575,760B) 0x10BCC1: allocate (alloc_traits.h:133)
  420:
          ->22.95% (552,575,760B) 0x10BCC1: _M_allocate (stl_vector.h:343)
  421:
            ->22.95% (552,575,760B) 0x10BCC1: _M_create_storage (stl_vector.h:3
58)
  422:
             ->22.95% (552,575,760B) 0x10BCC1: _Vector_base (stl_vector.h:302)
               ->22.95% (552,575,760B) 0x10BCC1: vector (stl_vector.h:552)
  423:
                 ->22.95% (552,575,760B) 0x10BCC1: construct (new_allocator.h:
  424:
159)
  425:
                   ->22.95% (552,575,760B) 0x10BCC1: construct<std::vector<int
> > (alloc_traits.h:140)
  426:
                     ->22.95% (552,575,760B) 0x10BCC1: push_back (stl_vector.h
:1189)
  427:
                       ->22.95% (552,575,760B) 0x10BCC1: EDistance::EDistance(
std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >,
std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >
) (EDistance.cpp:18)
  428:
                         ->22.95% (552,575,760B) 0x10A8F1: main (main.cpp:25)
  429:
  430: ->00.05% (1,286,122B) in 1+ places, all below ms_print's threshold (01.00
응)
  432: ---
                              total(B) useful-heap(B) extra-heap(B)
  433:
               time(i)
cks(B)
  434: -----
  435: 57 6,192,803,658
                          2,469,532,184 2,469,095,802
                                                             436,382
    Ω
  436: 58 6,254,404,042
                           2,531,091,224
                                           2,530,643,962
                                                              447,262
    0
  437:
       59 6,316,004,426
                           2,592,650,264
                                           2,592,192,122
                                                              458,142
    0
  438:
       60 6,377,604,810
                           2,654,209,304
                                           2,653,740,282
                                                              469,022
    0
  439: 61 6,439,205,194
                           2,715,768,344
                                           2,715,288,442
                                                              479,902
    0
  440: 62 6,500,805,578
                           2,777,327,384
                                           2,776,836,602
                                                              490,782
    0
                           2,838,886,424 2,838,384,762
  441: 63 6,562,405,962
                                                              501,662
    Ω
  442: 64 6,624,006,346
                           2,900,445,464
                                           2,899,932,922
                                                              512,542
    0
  443:
       65 6,685,606,730
                          2,962,004,504 2,961,481,082
                                                             523,422
    0
  444: 66 6,747,207,114 3,023,563,544 3,023,029,242
    0
  445: 99.98% (3,023,029,242B) (heap allocation functions) malloc/new/new[], --a
lloc-fns, etc.
```

446: ->61.31% (1,853,685,760B) 0x10C0CA: allocate (new_allocator.h:114)

```
447: | ->61.31% (1,853,685,760B) 0x10C0CA: allocate (alloc_traits.h:133)
           ->61.31% (1,853,685,760B) 0x10C0CA: _M_allocate (stl_vector.h:343)
  448:
  449: |
            ->61.31% (1,853,685,760B) 0x10C0CA: _M_create_storage (stl_vector.h
:358)
  450:
              ->61.31% (1,853,685,760B) 0x10C0CA: _Vector_base (stl_vector.h:30
2)
  451:
                 ->61.31% (1,853,685,760B) 0x10C0CA: vector (stl_vector.h:552)
  452:
                  ->61.31% (1,853,685,760B) 0x10C0CA: _Construct<std::vector<in
t>, std::vector<int> > (stl_construct.h:83)
                     ->61.31% (1,853,685,760B) 0x10C0CA: __uninit_copy<std::vect
  453:
or<int>*, std::vector<int>*> (stl_uninitialized.h:83)
                       ->61.31% (1,853,685,760B) 0x10C0CA: uninitialized_copy<st
d::vector<int>*, std::vector<int>*> (stl_uninitialized.h:140)
455: | ->61.31% (1,853,685,760B) 0x10C0CA: _uninitialized_cop y_a<std::vector<int>*, std::vector<int> > (stl_uninitialized.
h:307)
                           ->61.31% (1,853,685,760B) 0x10C0CA: __uninitialized_m
  456: I
ove_if_noexcept_a<std::vector<int>*, std::vector<int>*, std::allocator<std::vect</pre>
or<int> > > (stl_uninitialized.h:329)
  457:
                             ->61.31% (1,853,685,760B) 0x10C0CA: std::vector<std
::vector<int, std::allocator<int> >, std::allocator<std::vector<int, std::alloca
tor<int> > > ::_M_realloc_insert(__gnu_cxx::__normal_iterator<std::vector<int,</pre>
std::allocator<int> >*, std::vector<std::vector<int, std::allocator<int> >, std:
:allocator<std::vector<int, std::allocator<int> > > >, std::vector<int, std::a</pre>
llocator<int> > const&) (vector.tcc:474)
                              ->61.31% (1,853,685,760B) 0x10BD3B: push_back (st
l_vector.h:1195)
                                 ->61.31% (1,853,685,760B) 0x10BD3B: EDistance::
  459:
EDistance(std::__cxx11::basic_string<char, std::char_traits<char>, std::allocato
r<char> >, std::__cxx11::basic_string<char, std::char_traits<char>, std::allocat
or<char> >) (EDistance.cpp:18)
  460:
                                   ->61.31% (1,853,685,760B) 0x10A8F1: main (mai
n.cpp:25)
  461:
  462: ->38.63% (1,168,057,360B) 0x10BCC1: allocate (new_allocator.h:114)
       ->38.63% (1,168,057,360B) 0x10BCC1: allocate (alloc_traits.h:133)
  464:
           ->38.63% (1,168,057,360B) 0x10BCC1: _M_allocate (stl_vector.h:343)
  465:
            ->38.63% (1,168,057,360B) 0x10BCC1: _M_create_storage (stl_vector.h
:358)
  466:
              ->38.63% (1,168,057,360B) 0x10BCC1: _Vector_base (stl_vector.h:30
2)
                ->38.63% (1,168,057,360B) 0x10BCC1: vector (stl_vector.h:552)
  467:
  468: |
                  ->38.63% (1,168,057,360B) 0x10BCC1: construct (new_allocator.
h:159)
                     ->38.63% (1,168,057,360B) 0x10BCC1: construct<std::vector<i
nt> > (alloc_traits.h:140)
  470:
                       ->38.63% (1,168,057,360B) 0x10BCC1: push_back (stl_vector
.h:1189)
                         ->38.63% (1,168,057,360B) 0x10BCC1: EDistance::EDistanc
e(std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char>
>, std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char>
>) (EDistance.cpp:18)
  472:
                          ->38.63% (1,168,057,360B) 0x10A8F1: main (main.cpp:25
)
  473: |
  474: ->00.04% (1,286,122B) in 1+ places, all below ms_print's threshold (01.00
응)
  475:
  476: ---
  477:
                  time(i)
                             total(B) useful-heap(B) extra-heap(B)
                                                                           sta
cks(B)
  478: -----
```

479: 67 6,808,807,498 3,085,122,584 3,084,577,402 545,182

valgrin	dOut	put.txt	Mon	Apr 04	19:36:40	2022	15	
0 480:	68	6,870,407,882	2	3,146,	681,624	3,146	, 125 , 562	556,062
0 481:	69	30,570,148,197	7	3,201,	904,240	3,201	,338,395	565,845