Flat profile:

Each sample counts as 0.01 seconds. no time accumulated

```
% cumulative self
                            self
                                  tota1
time seconds seconds calls Ts/call Ts/call name
 0.00
                      2002
                             0.00
                                    0.00 mlib add(double, double, double*)
        0.00
               0.00
 0.00
        0.00
               0.00
                      1002
                              0.00
                                    0.00 mlib power(double, unsigned int, double*)
                                    0.00 gnu cxx:: promote 2<double, unsigned int, gnu cxx:: promot
 0.00
               0.00
                      1002
                              0.00
        0.00
e<double, std:: is integer<double>:: value>:: type, gnu cxx:: promote<unsigned int, std:: is integer<uns
igned int>:: value>:: type>:: type std::pow<double, unsigned int>(double, unsigned int)
                                   0.00 mlib sub(double, double, double*)
 0.00
        0.00
               0.00
                        5
                            0.00
                                   0.00 mlib div(double, double, double*)
                        2
                            0.00
 0.00
        0.00
               0.00
                                  0.00 GLOBAL sub I main
 0.00
        0.00
               0.00
                        1
                            0.00
                                   0.00 static initialization and destruction 0(int, int)
                            0.00
 0.00
        0.00
               0.00
                        1
 0.00
               0.00
                        1
                            0.00
                                   0.00 mlib mul(double, double, double*)
        0.00
                                   0.00 mlib root(double, unsigned int, double*)
               0.00
                        1
                            0.00
 0.00
        0.00
```

% the percentage of the total running time of the time program used by this function.

cumulative a running sum of the number of seconds accounted seconds for by this function and those listed above it.

self the number of seconds accounted for by this seconds function alone. This is the major sort for this listing.

calls the number of times this function was invoked, if this function is profiled, else blank.

self the average number of milliseconds spent in this ms/call function per call, if this function is profiled, else blank.

total the average number of milliseconds spent in this ms/call function and its descendents per call, if this function is profiled, else blank.

name the name of the function. This is the minor sort for this listing. The index shows the location of the function in the gprof listing. If the index is in parenthesis it shows where it would appear in the gprof listing if it were to be printed.

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Call graph (explanation follows)

```
index % time self children called name
         0.00 0.00 2002/2002 main [6]
      0.0 0.00 0.00 2002 mlib_add(double, double, double*) [8]
         0.00 0.00 1002/1002 main [6]
      0.0 0.00 0.00 1002 mlib power(double, unsigned int, double*) [9]
[9]
         0.00 0.00 1002/1002 __gnu_cxx::__promote_2<double, unsigned int, __gnu_cxx::__promote<dou
ble, std::__is_integer<double>::__value>::__type, __gnu_cxx::__promote<unsigned int, std::__is_integer<unsigned
int>:: value>:: type>:: type std::pow<double, unsigned int>(double, unsigned int) [10]
_____
         [10] 0.0 0.00 0.00 1002 __gnu_cxx::_promote_2<double, unsigned int, __gnu_cxx::_promote<double e, std::_is_integer<double>::_value>::_type, __gnu_cxx::_promote<unsigned int, std::_is_integer<unsigned in
t>::_value>::_type>::_type std::pow<double, unsigned int>(double, unsigned int) [10]
0.00 0.00 5/5 main [6]
[11] 0.0 0.00 0.00 5 mlib_sub(double, double, double*) [11]
0.00 0.00 2/2 main [6]
[12] 0.0 0.00 0.00 2 mlib_div(double, double*) [12]
0.00 0.00 1/1 __libc_csu_init [24]
[13] 0.0 0.00 0.00 1 __GLOBAL_sub_I_main [13]
        0.00 0.00 1/1 __static_initialization_and_destruction_0(int, int) [14]
         0.00 0.00 1/1 __GLOBAL__sub_I_main [13]
                                __static_initialization_and_destruction_0(int, int) [14]
[14] 0.0 0.00 0.00 1
0.00 0.00 1/1 main [6]
[15] 0.0 0.00 0.00 1 mlib_mul(double, double*) [15]
0.00 0.00 1/1 main [6]
[16] 0.0 0.00 0.00 1 mlib_root(double, unsigned int, double*) [16]
```

This table describes the call tree of the program, and was sorted by the total amount of time spent in each function and its children.

Each entry in this table consists of several lines. The line with the index number at the left hand margin lists the current function. The lines above it list the functions that called this function, and the lines below it list the functions this one called.

This line lists:

index A unique number given to each element of the table. Index numbers are sorted numerically. The index number is printed next to every function name so it is easier to look up where the function is in the table.

% time This is the percentage of the 'total' time that was spent in this function and its children. Note that due to different viewpoints, functions excluded by options, etc, these numbers will NOT add up to 100%.

self This is the total amount of time spent in this function.

children This is the total amount of time propagated into this function by its children.

called This is the number of times the function was called. If the function called itself recursively, the number only includes non-recursive calls, and is followed by a '+' and the number of recursive calls.

name The name of the current function. The index number is printed after it. If the function is a member of a cycle, the cycle number is printed between the function's name and the index number.

For the function's parents, the fields have the following meanings:

self This is the amount of time that was propagated directly from the function into this parent.

children This is the amount of time that was propagated from the function's children into this parent.

called This is the number of times this parent called the function '/' the total number of times the function was called. Recursive calls to the function are not included in the number after the '/'.

name This is the name of the parent. The parent's index number is printed after it. If the parent is a member of a cycle, the cycle number is printed between the name and the index number.

If the parents of the function cannot be determined, the word `<spontaneous>' is printed in the `name' field, and all the other fields are blank.

For the function's children, the fields have the following meanings:

self This is the amount of time that was propagated directly from the child into the function.

children This is the amount of time that was propagated from the child's children to the function.

called This is the number of times the function called this child '/' the total number of times the child was called. Recursive calls by the child are not listed in the number after the '/'.

name This is the name of the child. The child's index number is printed after it. If the child is a member of a cycle, the cycle number is printed between the name and the index number. If there are any cycles (circles) in the call graph, there is an entry for the cycle-as-a-whole. This entry shows who called the cycle (as parents) and the members of the cycle (as children.)

The `+' recursive calls entry shows the number of function calls that were internal to the cycle, and the calls entry for each member shows, for that member, how many times it was called from other members of the cycle.

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Index by function name

- [13] _GLOBAL__sub_I_main [8] mlib_add(double, double, double*) [11] mlib_sub(double, double*) [9] mlib_power(double, unsigned int, double*) [12] mlib_div(double, double, double*) [16] mlib_root(double, unsigned int, double*)
- [14] __static_initialization_and_destruction_0(int, int) [15] mlib_mul(double, double, double*) [10] __gnu_cxx::_promote_2<double, unsigned int, __gnu_cxx::_promote<double, std::_is_integer<double>::_value>::_type, __g nu_cxx::_promote<unsigned int, std::_is_integer<unsigned int>::_value>::_type>::_type std::pow<double, unsigned int>(double, unsigned int)