Profiler_example

September 6, 2021

```
[1]: import cProfile
import re
cProfile.run('re.compile("foo|bar")')
```

214 function calls (207 primitive calls) in 0.001 seconds

Ordered by: standard name

```
ncalls
          tottime
                    percall
                              cumtime
                                       percall filename:lineno(function)
             0.000
                       0.000
                                0.001
                                          0.001 <string>:1(<module>)
        1
        2
             0.000
                       0.000
                                0.000
                                         0.000 enum.py:284(__call__)
        2
             0.000
                       0.000
                                0.000
                                         0.000 enum.py:526(__new__)
             0.000
                                0.000
                                         0.000 enum.py:836(__and__)
        1
                       0.000
                                         0.001 re.py:232(compile)
        1
             0.000
                       0.000
                                0.001
        1
             0.000
                       0.000
                                0.001
                                         0.001 re.py:271(_compile)
                                         0.000
        1
             0.000
                       0.000
                                0.000
sre_compile.py:249(_compile_charset)
             0.000
                       0.000
                                0.000
                                         0.000
sre_compile.py:276(_optimize_charset)
        2
             0.000
                       0.000
                                0.000
                                         0.000 sre_compile.py:453(_get_iscased)
                                          0.000
        1
             0.000
                       0.000
                                0.000
sre_compile.py:461(_get_literal_prefix)
             0.000
                       0.000
                                0.000
                                         0.000
sre_compile.py:492(_get_charset_prefix)
             0.000
                       0.000
                                0.000
                                         0.000 sre_compile.py:536(_compile_info)
        1
        2
             0.000
                       0.000
                                0.000
                                         0.000 sre_compile.py:595(isstring)
        1
             0.000
                       0.000
                                0.000
                                         0.000 sre_compile.py:598(_code)
      3/1
                                0.000
                                         0.000 sre_compile.py:71(_compile)
             0.000
                       0.000
        1
             0.000
                       0.000
                                0.001
                                         0.001 sre_compile.py:759(compile)
        3
             0.000
                       0.000
                                0.000
                                         0.000 sre_parse.py:111(__init__)
        7
                                         0.000 sre_parse.py:160(__len__)
             0.000
                       0.000
                                0.000
       18
             0.000
                       0.000
                                0.000
                                         0.000 sre_parse.py:164(__getitem__)
             0.000
                       0.000
                                0.000
                                         0.000 sre_parse.py:172(append)
        7
                                         0.000 sre_parse.py:174(getwidth)
      3/1
             0.000
                       0.000
                                0.000
             0.000
                       0.000
                                0.000
                                         0.000 sre parse.py:224( init )
        1
        8
                                         0.000 sre_parse.py:233(__next)
             0.000
                       0.000
                                0.000
        2
                                         0.000 sre_parse.py:249(match)
             0.000
                       0.000
                                0.000
                                         0.000 sre_parse.py:254(get)
        6
                       0.000
                                0.000
             0.000
```

```
0.000
                      0.000
                                0.000
                                         0.000 sre_parse.py:286(tell)
        1
             0.000
                      0.000
                                0.000
                                         0.000 sre_parse.py:417(_parse_sub)
        1
                               0.000
        2
             0.000
                      0.000
                                         0.000 sre_parse.py:475(_parse)
        1
             0.000
                      0.000
                               0.000
                                         0.000 sre_parse.py:76(__init__)
                                         0.000 sre parse.py:81(groups)
        2
             0.000
                      0.000
                               0.000
        1
             0.000
                      0.000
                               0.000
                                         0.000 sre_parse.py:903(fix_flags)
                                         0.000 sre_parse.py:919(parse)
        1
             0.000
                      0.000
                               0.000
                                         0.000 {built-in method _sre.compile}
        1
             0.000
                      0.000
                               0.000
        1
             0.000
                      0.000
                               0.001
                                         0.001 {built-in method builtins.exec}
                      0.000
                               0.000
                                         0.000 {built-in method
       25
             0.000
builtins.isinstance}
    29/26
             0.000
                      0.000
                               0.000
                                         0.000 {built-in method builtins.len}
                               0.000
        2
             0.000
                      0.000
                                         0.000 {built-in method builtins.max}
        9
             0.000
                      0.000
                               0.000
                                         0.000 {built-in method builtins.min}
        6
             0.000
                      0.000
                               0.000
                                         0.000 {built-in method builtins.ord}
       48
             0.000
                      0.000
                               0.000
                                         0.000 {method 'append' of 'list'
objects}
                               0.000
                                         0.000 {method 'disable' of
        1
             0.000
                      0.000
'_lsprof.Profiler' objects}
             0.000
                      0.000
                               0.000
                                         0.000 {method 'find' of 'bytearray'
objects}
        1
             0.000
                      0.000
                               0.000
                                         0.000 {method 'items' of 'dict' objects}
```

[2]: cProfile.run('re.compile("date")')

109 function calls (108 primitive calls) in 0.000 seconds

Ordered by: standard name

```
percall filename:lineno(function)
  ncalls tottime
                    percall
                             cumtime
             0.000
                      0.000
                               0.000
                                         0.000 <string>:1(<module>)
        1
        2
             0.000
                      0.000
                               0.000
                                         0.000 enum.py:284( call )
        2
             0.000
                      0.000
                               0.000
                                         0.000 enum.py:526(__new__)
             0.000
                               0.000
                                         0.000 enum.py:836( and )
        1
                      0.000
        1
             0.000
                      0.000
                               0.000
                                         0.000 re.py:232(compile)
        1
             0.000
                      0.000
                               0.000
                                         0.000 re.py:271(_compile)
                      0.000
                               0.000
                                         0.000
             0.000
sre_compile.py:432(_generate_overlap_table)
                               0.000
                      0.000
                                         0.000 sre_compile.py:453(_get_iscased)
        1
             0.000
                               0.000
                                         0.000
             0.000
                      0.000
sre_compile.py:461(_get_literal_prefix)
        1
             0.000
                      0.000
                               0.000
                                         0.000 sre_compile.py:536(_compile_info)
        2
             0.000
                      0.000
                               0.000
                                         0.000 sre_compile.py:595(isstring)
             0.000
                      0.000
                               0.000
                                         0.000 sre_compile.py:598(_code)
        1
                               0.000
        1
             0.000
                      0.000
                                         0.000 sre_compile.py:71(_compile)
        1
             0.000
                      0.000
                               0.000
                                         0.000 sre_compile.py:759(compile)
```

```
0.000
                                             0.000 sre_parse.py:164(__getitem__)
            4
                 0.000
                           0.000
            4
                 0.000
                           0.000
                                    0.000
                                             0.000 sre_parse.py:172(append)
                                             0.000 sre parse.py:174(getwidth)
                 0.000
                           0.000
                                    0.000
            1
            1
                 0.000
                           0.000
                                    0.000
                                             0.000 sre_parse.py:224(__init__)
                                             0.000 sre_parse.py:233(__next)
            5
                 0.000
                           0.000
                                    0.000
                                             0.000 sre_parse.py:249(match)
            1
                 0.000
                           0.000
                                    0.000
            4
                 0.000
                           0.000
                                    0.000
                                             0.000 sre_parse.py:254(get)
                                    0.000
                                             0.000 sre_parse.py:286(tell)
            1
                 0.000
                           0.000
            1
                 0.000
                           0.000
                                    0.000
                                             0.000 sre_parse.py:417(_parse_sub)
                 0.000
                           0.000
                                    0.000
                                             0.000 sre_parse.py:475(_parse)
            1
                           0.000
                                    0.000
                                             0.000 sre_parse.py:76(__init__)
            1
                 0.000
                                             0.000 sre_parse.py:81(groups)
            2
                 0.000
                           0.000
                                    0.000
                                    0.000
                                             0.000 sre_parse.py:903(fix_flags)
            1
                 0.000
                           0.000
                 0.000
                           0.000
                                    0.000
                                             0.000 sre_parse.py:919(parse)
            1
            1
                 0.000
                           0.000
                                    0.000
                                             0.000 {built-in method _sre.compile}
                                    0.000
                                             0.000 {built-in method builtins.exec}
            1
                 0.000
                           0.000
           11
                 0.000
                           0.000
                                    0.000
                                             0.000 {built-in method
    builtins.isinstance}
                                    0.000
                                             0.000 {built-in method builtins.len}
        13/12
                 0.000
                           0.000
            3
                 0.000
                           0.000
                                    0.000
                                             0.000 {built-in method builtins.min}
                                             0.000 {built-in method builtins.ord}
            4
                 0.000
                           0.000
                                    0.000
           25
                 0.000
                           0.000
                                    0.000
                                             0.000 {method 'append' of 'list'
    objects}
                                    0.000
                                             0.000 {method 'disable' of
                 0.000
                           0.000
            1
    '_lsprof.Profiler' objects}
                                             0.000 {method 'extend' of 'list'
            2
                 0.000
                           0.000
                                    0.000
    objects}
                 0.000
                           0.000
                                    0.000
                                             0.000 {method 'items' of 'dict' objects}
[3]: cProfile.run('re.compile("date")', 'restats')
[4]: import pstats
     from pstats import SortKey
     p = pstats.Stats('restats')
     p.strip_dirs().sort_stats(-1).print_stats()
    Mon Sep 6 13:27:20 2021
                                 restats
             6 function calls in 0.000 seconds
       Ordered by: standard name
       ncalls
              tottime percall cumtime percall filename: lineno(function)
                 0.000
                           0.000
                                    0.000
                                             0.000 <string>:1(<module>)
```

0.000

0.000

1

1

0.000

0.000

0.000

0.000

0.000 sre_parse.py:111(__init__)

0.000 sre_parse.py:160(__len__)

```
0.000
                      0.000
                               0.000
                                         0.000 re.py:232(compile)
        1
             0.000
                      0.000
                               0.000
                                         0.000 re.py:271(_compile)
        1
             0.000
                      0.000
                               0.000
                                         0.000 {built-in method builtins.exec}
        1
        1
             0.000
                      0.000
                               0.000
                                         0.000 {built-in method
builtins.isinstance}
             0.000
                      0.000
                               0.000
                                        0.000 {method 'disable' of
' lsprof.Profiler' objects}
```

[4]: <pstats.Stats at 0x7f26c05e9e90>

```
[5]: p.sort_stats(SortKey.NAME)
p.print_stats()
```

Mon Sep 6 13:27:20 2021 restats

6 function calls in 0.000 seconds

Ordered by: function name

```
ncalls tottime percall cumtime percall filename: lineno(function)
             0.000
                      0.000
                               0.000
                                        0.000 {built-in method builtins.exec}
        1
                                        0.000 {built-in method
        1
             0.000
                      0.000
                               0.000
builtins.isinstance}
             0.000
                                        0.000 {method 'disable' of
        1
                      0.000
                               0.000
'_lsprof.Profiler' objects}
        1
             0.000
                      0.000
                               0.000
                                        0.000 <string>:1(<module>)
             0.000
                      0.000
                               0.000
                                        0.000 re.py:271(_compile)
             0.000
                                        0.000 re.py:232(compile)
        1
                      0.000
                               0.000
```

[5]: <pstats.Stats at 0x7f26c05e9e90>

```
[6]: p.sort_stats(SortKey.CUMULATIVE).print_stats(10)
```

Mon Sep 6 13:27:20 2021 restats

6 function calls in 0.000 seconds

Ordered by: cumulative time

```
ncalls tottime percall cumtime percall filename:lineno(function)
         0.000
                                    0.000 {built-in method builtins.exec}
     1
                  0.000
                           0.000
                                    0.000 <string>:1(<module>)
         0.000
                  0.000
                           0.000
         0.000
                  0.000
                         0.000
                                    0.000 re.py:232(compile)
     1
     1
         0.000
                  0.000
                         0.000
                                    0.000 re.py:271(_compile)
                                    0.000 {built-in method
     1
         0.000
                  0.000
                           0.000
```

```
builtins.isinstance}
    1  0.000  0.000  0.000  0.000 {method 'disable' of '_lsprof.Profiler' objects}
```

[6]: <pstats.Stats at 0x7f26c05e9e90>