

$$O(n) = O\left(\frac{n}{2}\right) \text{ or } \frac{n}{4}$$

dominant term

Not in terms of BUT

$O\left(\frac{n}{2}\right)$ is, in reality,

twice as fast as
to clock time

$O(n)$

Make spell checker

$\frac{7}{2}$ ~~3~~ ①

Note: if ($a > 5$)

{
result = 3

{
else

{
result = 4

result = $a > 5 ? 3 : 4$

?: → Known as the ternary operator

struct rusage contains ~~datatypes~~ variables pertaining to CPU usage

② So struct rusage before, after; simply declares to sets of the data, how much CPU is used before and after the program runs.

getrusage is a function in sys/resource.h takes ² parameters:

③ Sum of resources used by function
1. int who → RUSAGE_SELF
2. struct rusage *usage
a pointer to → usage struct

getrusage returns 0 when successful and -1 when failed

AND since rusage is a pointer
all the variables in the structure
get updated when getrusage
is called

④ we use getrusage before
loading the dictionary and
after loading the dictionary,
presumably to ~~check~~ track
efficiency during the process

⑤ Calculate (& before, & after)

* by passing pointers we can directly interface
w/ the ~~data~~ values stored at address &
before.

or if these pointers are NULL
exit

* All converted to seconds
15. otherwise, perform the following
arithmetic and return result
time used
(After) UserCPU (seconds) + UserCPU (micro-seconds)
time used
(Before) UserCPU (seconds) + UserCPU (micro-seconds)
time used
(After) KernelCPU (seconds) + 11 11 11 (micro-seconds)
(Before) 11 11 11 11 11 + 11 11 11 11