## 查看size & 有效的优化参数

## **Code Generation Options**

- -00, -01, -02, -03, -0fast, -0s, -0z, -0g, -0, -04¶ Specify which optimization level to use:
- -O0 Means "no optimization": this level compiles the fastest and generates the most debuggable code.
- -O1 Somewhere between -O0 and -O2.
- -O2 Moderate level of optimization which enables most optimizations.
- -O3 Like -O2, except that it enables optimizations that take longer to perform or that may generate larger code (in an attempt to make the program run faster).
- -Ofast Enables all the optimizations from -O3 along with other aggressive optimizations that may violate strict compliance with language standards.
- -Os Like -O2 with extra optimizations to reduce code size.
- -Oz Like -Os (and thus -O2), but reduces code size further.
- -Og Like -O1. In future versions, this option might disable different optimizations in order to improve debuggability.
- -O Equivalent to -O1.
- -O4 and higher

Currently equivalent to -O3

• 在-O.: 等优化参数中, -Oz优化最为

```
[syh@506e56724728 size]$ pwd
/home/syh/size
[syh@506e56724728 size]$ uname -a
Linux 506e56724728 6.3.9-orbstack-00173-g5c15eb5460a9 #1 SMP Sun Jun 25 13:50:22 UTC 2023 aarch64 aarch64 aarch64 GNU/Linux
[syh@506e56724728 size]$ ls
test test.cpp
[syh@506e56724728 size]$ clang++ test.cpp -o test -std=c++17
[syh@506e56724728 size]$ size test
                  bss
                                   hex filename
         data
                          dec
                        44068
                                 ac24 test
 42596
          912
                   560
[syh@506e56724728 size]$ clang++ test.cpp -o test -std=c++17 -0z
[syh@506e56724728 size]$ size test
                                  hex filename
          data
                   bss
                          dec
          896
                   560
                        13148
                                 335c test
 11692
[syh@506e56724728 size]$
```