

代码覆盖率

工具: gcov lcov

终局生成

执行命令:

```
./sudoku -c 10
```

LCOV - code coverage report					
Current view: top level - /home/yuwensq/upmem/sudoku		Hit		Total	Coverage
Test: app.info		Lines:	61	261	23.4 %
Date: 2023-06-29 03:48:57		Functions:	5	12	41.7 %
Filename	Line Coverage	Functions			
Sudoku.cpp	<div><div></div></div>	22.0 %	40 / 182	30.0 %	3 / 10
main.cpp	<div><div></div></div>	26.6 %	21 / 79	100.0 %	2 / 2
Generated by: LCOV version 1.14					

游戏生成

执行命令:

```
./sudoku -n 1000
```

LCOV - code coverage report					
Current view: top level - /home/yuwensq/upmem/sudoku		Hit		Total	Coverage
Test: app.info		Lines:	96	261	36.8 %
Date: 2023-06-29 03:54:57		Functions:	6	12	50.0 %
Filename	Line Coverage	Functions			
Sudoku.cpp	<div><div></div></div>	40.1 %	73 / 182	40.0 %	4 / 10
main.cpp	<div><div></div></div>	29.1 %	23 / 79	100.0 %	2 / 2
Generated by: LCOV version 1.14					

```
./sudoku -n 1000 -m 3
```

LCOV - code coverage report					
Current view: top level - /home/yuwensq/upmem/sudoku		Hit		Total	Coverage
Test: app.info		Lines:	98	261	37.5 %
Date: 2023-06-29 04:04:39		Functions:	6	12	50.0 %
Filename	Line Coverage	Functions			
Sudoku.cpp	<div><div></div></div>	39.6 %	72 / 182	40.0 %	4 / 10
main.cpp	<div><div></div></div>	32.9 %	26 / 79	100.0 %	2 / 2
Generated by: LCOV version 1.14					

```
./sudoku -n 1000 -r 30~50
```

LCOV - code coverage report

Current view: top level - /home/yuwensq/upmem/sudoku		Hit	Total	Coverage
Test: app.info		Lines: 106	261	40.6 %
Date: 2023-06-29 04:05:41		Functions: 6	12	50.0 %
Filename	Line Coverage ↕	Functions ↕		
Sudoku.cpp	<div><div></div></div> 39.6 % 72 / 182	40.0 %	4 / 10	
main.cpp	<div><div></div></div> 43.0 % 34 / 79	100.0 %	2 / 2	
Generated by: LCOV version 1.14				

./sudoku -n 1000 -u

LCOV - code coverage report

Current view: top level - /home/yuwensq/upmem/sudoku		Hit	Total	Coverage
Test: app.info		Lines: 147	261	56.3 %
Date: 2023-06-29 04:06:26		Functions: 9	12	75.0 %
Filename	Line Coverage ↕	Functions ↕		
Sudoku.cpp	<div><div></div></div> 65.9 % 120 / 182	70.0 %	7 / 10	
main.cpp	<div><div></div></div> 34.2 % 27 / 79	100.0 %	2 / 2	
Generated by: LCOV version 1.14				

./sudoku -n 1000 -m 3 -r 20~55 -u

LCOV - code coverage report

Current view: top level - /home/yuwensq/upmem/sudoku		Hit	Total	Coverage
Test: app.info		Lines: 157	261	60.2 %
Date: 2023-06-29 04:07:47		Functions: 9	12	75.0 %
Filename	Line Coverage ↕	Functions ↕		
Sudoku.cpp	<div><div></div></div> 65.4 % 119 / 182	70.0 %	7 / 10	
main.cpp	<div><div></div></div> 48.1 % 38 / 79	100.0 %	2 / 2	
Generated by: LCOV version 1.14				

数独求解

执行命令：

./sudoku -s game.txt

LCOV - code coverage report

Current view: top level - /home/yuwensq/upmem/sudoku		Hit	Total	Coverage
Test: app.info		Lines: 105	261	40.2 %
Date: 2023-06-29 04:11:42		Functions: 7	12	58.3 %
Filename	Line Coverage ↕	Functions ↕		
Sudoku.cpp	<div><div></div></div> 45.1 % 82 / 182	50.0 %	5 / 10	
main.cpp	<div><div></div></div> 29.1 % 23 / 79	100.0 %	2 / 2	

覆盖率如上所示，所有测试样例相加几乎覆盖了所有的代码。