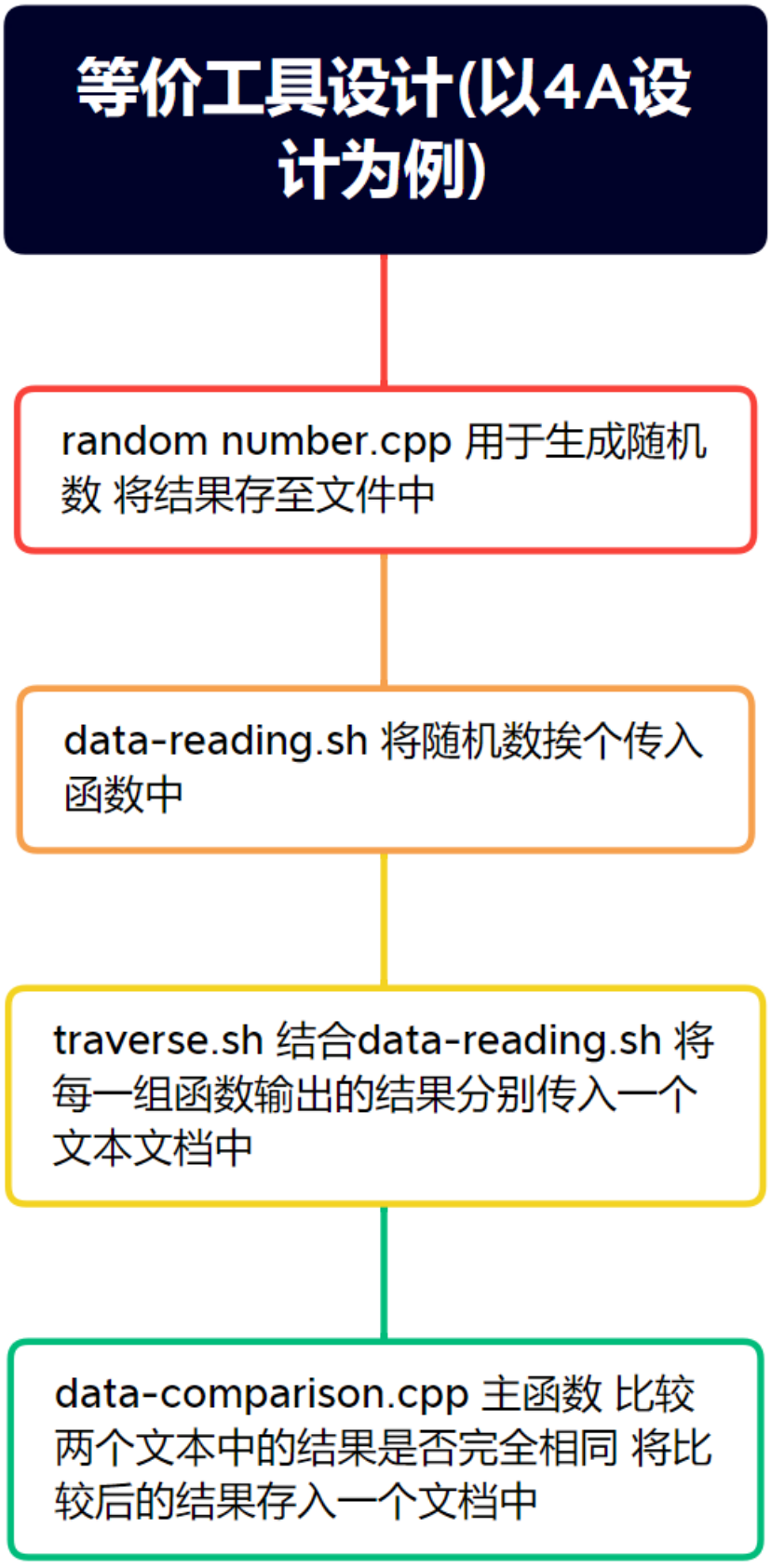
lab4-report-201830148

1.主要流程



2.核心函数分析

data-comparison.cpp
strpl():用于完成字符串指定位置出的替换 目的是访问不同的文档
main():进行文件的读入与比较，将结果存入judge-equal.txt中

3.结果预览

```
input/4A/48762087.cpp   input/4A/84822638.cpp   0
input/4A/48762087.cpp   input/4A/84822639.cpp   0
input/4A/48762087.cpp   input/4A/101036360.cpp  0
input/4A/48762087.cpp   input/4A/117364748.cpp  0
input/4A/48762087.cpp   input/4A/127473352.cpp  0
input/4A/48762087.cpp   input/4A/134841308.cpp  0
input/4A/48762087.cpp   input/4A/173077807.cpp  0
input/4A/84822638.cpp   input/4A/84822639.cpp   1
input/4A/84822638.cpp   input/4A/101036360.cpp  0
input/4A/84822638.cpp   input/4A/117364748.cpp  0
input/4A/84822638.cpp   input/4A/127473352.cpp  0
input/4A/84822638.cpp   input/4A/134841308.cpp  0
input/4A/84822638.cpp   input/4A/173077807.cpp  1
input/4A/84822639.cpp   input/4A/101036360.cpp  0
input/4A/84822639.cpp   input/4A/117364748.cpp  0
input/4A/84822639.cpp   input/4A/127473352.cpp  0
input/4A/84822639.cpp   input/4A/134841308.cpp  0
input/4A/84822639.cpp   input/4A/173077807.cpp  1
input/4A/101036360.cpp  input/4A/117364748.cpp  0
input/4A/101036360.cpp  input/4A/127473352.cpp  0
input/4A/101036360.cpp  input/4A/134841308.cpp  0
input/4A/101036360.cpp  input/4A/173077807.cpp  0
input/4A/117364748.cpp  input/4A/127473352.cpp  0
input/4A/117364748.cpp  input/4A/134841308.cpp  0
input/4A/117364748.cpp  input/4A/173077807.cpp  0
input/4A/127473352.cpp  input/4A/134841308.cpp  1
input/4A/127473352.cpp  input/4A/173077807.cpp  0
input/4A/134841308.cpp  input/4A/173077807.cpp  0
```

说明 0表示不等价 1表示等价

```
1
8
16
1
1
6
12
5
7
14
5
11
9
15
11
13
6
13
3
14
9
4
10
8
1
12
6
5
15
13
15
2
15
5
15
2
11
8
5
15
12
7
16
6
```

注：随机数生成文档

YES
YES
YES
YES
NO
NO
YES
YES
YES
YES
YES
NO
NO
YES
NO
YES
NO
NO
NO
YES
NO
YES
NO
NO
YES
YES
NO
YES
NO
NO
NO
NO
NO
YES
NO
NO
NO
NO
YES
NO
NO
YES
NO
YES
YES
YES
YES
NO
YES
NO

将输出存入一个存档

4.git具体操作

项目地址：https://github.com/daievan/lab4-201830148-daipanzhu

```
dai@MSI MINGW64 ~/Desktop/软件工程/lab4-201830148-戴攀暪/lab4-201830148-daipanzh
u (main)
$ git add .
warning: in the working copy of 'lab4-201830148-戴攀暪/lab4-code/code-4A/执行oj
程序/data-reading-4A.sh', LF will be replaced by CRLF the next time Git touches
it
warning: in the working copy of 'lab4-201830148-戴攀暪/lab4-code/code-4A/执行oj
程序/traverse-4A.sh', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'lab4-201830148-戴攀暪/lab4-code/code-50A/执行oj
程序/data-reading-50A.sh', LF will be replaced by CRLF the next time Git touches
 it
warning: in the working copy of 'lab4-201830148-戴攀暪/lab4-code/code-50A/执行oj
程序/traverse-50A.sh', LF will be replaced by CRLF the next time Git touches it
```

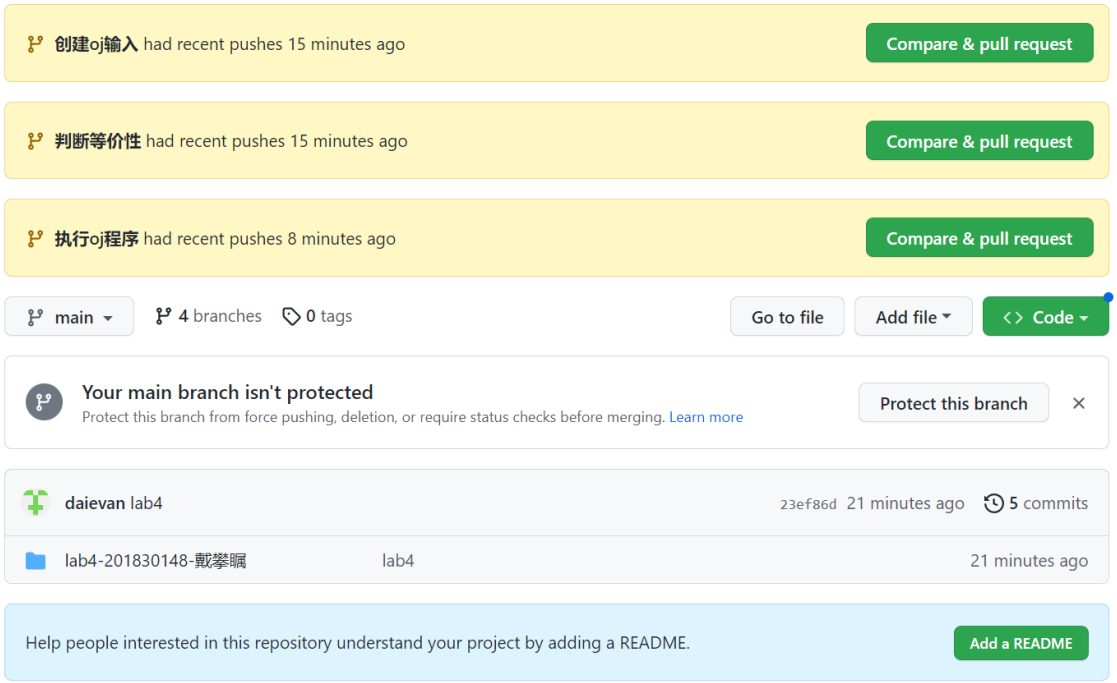
```
dai@MSI MINGW64 ~/Desktop/软件工程/lab4-201830148-戴攀暪/lab4-201830148-daipanzhu (main)
$ git commit -m "lab4"
[main (root-commit) 3404ca9] lab4
 11 files changed, 379 insertions(+)
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-4A/\345\210
\233\345\273\272oj\350\276\223\345\205\245/random number-4A.cpp"
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-4A/\345\210
\244\346\226\255\347\255\211\344\273\267\346\200\247/data-comparison-4A.cpp"
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-4A/\346\211
\247\350\241\214oj\347\250\213\345\272\217/data-reading-4A.sh"
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-4A/\346\211
\247\350\241\214oj\347\250\213\345\272\217/traverse-4A.sh"
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-50A/\345\21
0\233\345\273\272oj\350\276\223\345\205\245/random number-50A.cpp"
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-50A/\345\21
0\244\346\226\255\347\255\211\344\273\267\346\200\247/data-comparison-50A.cpp"
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-50A/\346\21
1\247\350\241\214oj\347\250\213\345\272\217/data-reading-50A.sh"
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-50A/\346\21
1\247\350\241\214oj\347\250\213\345\272\217/traverse-50A.sh"
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/output/equal.csv
"
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/output/inequal.c
sv"
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-report-201830148.pdf"
```

```
dai@MSI MINGW64 ~/Desktop/软件工程/lab4-201830148-戴攀暪/lab4-201830148-daipanzhu (main)
$ git push
Enumerating objects: 24, done.
Counting objects: 100% (24/24), done.
Delta compression using up to 20 threads
Compressing objects: 100% (22/22), done.
Writing objects: 100% (24/24), 185.42 KiB | 26.49 MiB/s, done.
Total 24 (delta 3), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (3/3), done.
To https://github.com/daievan/lab4-201830148-daipanzhu.git
 * [new branch]      main -> main
```

```
dai@MSI MINGW64 ~/Desktop/软件工程/lab4-201830148-戴攀嘱/lab4-201830148-daipanzh
u/lab4-201830148-戴攀嘱/lab4-code/code-4A (main)
$ git checkout -b 执行oj程序
Switched to a new branch '执行oj程序'

dai@MSI MINGW64 ~/Desktop/软件工程/lab4-201830148-戴攀嘱/lab4-201830148-daipanzh
u/lab4-201830148-戴攀嘱/lab4-code/code-4A (执行oj程序)
$ git add data-reading-4A.sh
warning: in the working copy of 'lab4-201830148-戴攀嘱/lab4-code/code-4A/data-re
ading-4A.sh', LF will be replaced by CRLF the next time Git touches it

dai@MSI MINGW64 ~/Desktop/软件工程/lab4-201830148-戴攀嘱/lab4-201830148-daipanzh
u/lab4-201830148-戴攀嘱/lab4-code/code-4A (执行oj程序)
$ git add traverse-4A.sh
warning: in the working copy of 'lab4-201830148-戴攀嘱/lab4-code/code-4A/travers
e-4A.sh', LF will be replaced by CRLF the next time Git touches it

dai@MSI MINGW64 ~/Desktop/软件工程/lab4-201830148-戴攀嘱/lab4-201830148-daipanzh
u/lab4-201830148-戴攀嘱/lab4-code/code-4A (执行oj程序)
$ git commit -m "执行oj程序"
[执行oj程序 bf34849] 执行oj程序
 2 files changed, 31 insertions(+)
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-co
de/code-4A/data-reading-4A.sh"
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-co
de/code-4A/traverse-4A.sh"

dai@MSI MINGW64 ~/Desktop/软件工程/lab4-201830148-戴攀嘱/lab4-201830148-daipanzh
u/lab4-201830148-戴攀嘱/lab4-code/code-4A (执行oj程序)
$ git checkout main
Switched to branch 'main'
D       "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-4A/\345\210\233\3
45\273\272oj\350\276\223\345\205\245/random number-4A.cpp"
D       "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-4A/\345\210\244\3
46\226\255\347\255\211\344\273\267\346\200\247/data-comparison-4A.cpp"
D       "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-4A/\346\211\247\3
50\241\214oj\347\250\213\345\272\217/data-reading-4A.sh"
D       "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-4A/\346\211\247\3
50\241\214oj\347\250\213\345\272\217/traverse-4A.sh"
D       "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-50A/\345\210\233\
345\273\272oj\350\276\223\345\205\245/random number-50A.cpp"
D       "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-50A/\345\210\244\
346\226\255\347\255\211\344\273\267\346\200\247/data-comparison-50A.cpp"
D       "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-50A/\346\211\247\
350\241\214oj\347\250\213\345\272\217/data-reading-50A.sh"
D       "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-50A/\346\211\247\
350\241\214oj\347\250\213\345\272\217/traverse-50A.sh"
Your branch is ahead of 'origin/main' by 2 commits.
  (use "git push" to publish your local commits)

dai@MSI MINGW64 ~/Desktop/软件工程/lab4-201830148-戴攀嘱/lab4-201830148-daipanzhu/lab4-201830
148-戴攀嘱/lab4-code/code-4A (main)
$ git merge 执行oj程序
Updating 5ebaa07..bf34849
Fast-forward
 .../lab4-code/code-4A/data-reading-4A.sh"              | 14 ++++++++++++
 .../lab4-code/code-4A/traverse-4A.sh"                  | 17 ++++++++++++++++
 2 files changed, 31 insertions(+)
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-4A/da
ta-reading-4A.sh"
 create mode 100644 "lab4-201830148-\346\210\264\346\224\200\347\236\251/lab4-code/code-4A/tr
averse-4A.sh"
```

```
dai@MSI MINGW64 ~/Desktop/软件工程/lab4-201830148-戴攀暘/lab4-201830148-daipanzhu/lab4-201830148
b4-code/code-50A (main)
$ git push origin 创建oj输入
Enumerating objects: 35, done.
Counting objects: 100% (35/35), done.
Delta compression using up to 20 threads
Compressing objects: 100% (33/33), done.
Writing objects: 100% (35/35), 186.50 KiB | 26.64 MiB/s, done.
Total 35 (delta 4), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (4/4), done.
remote:
remote: Create a pull request for '创建oj输入' on GitHub by visiting:
remote:      https://github.com/daievan/lab4-201830148-daipanzhu/pull/new/%E5%88%9B%E5%BB%BAoj%E
%85%A5
remote:
To https://github.com/daievan/lab4-201830148-daipanzhu.git
 * [new branch]      创建oj输入 -> 创建oj输入

dai@MSI MINGW64 ~/Desktop/软件工程/lab4-201830148-戴攀暘/lab4-201830148-daipanzhu/lab4-201830148
b4-code/code-50A (main)
$ git push origin 判断等价性
Enumerating objects: 17, done.
Counting objects: 100% (17/17), done.
Delta compression using up to 20 threads
Compressing objects: 100% (12/12), done.
Writing objects: 100% (12/12), 2.19 KiB | 2.19 MiB/s, done.
Total 12 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), done.
remote:
remote: Create a pull request for '判断等价性' on GitHub by visiting:
remote:      https://github.com/daievan/lab4-201830148-daipanzhu/pull/new/%E5%88%A4%E6%96%AD%E7%
B%B7%E6%80%A7
remote:
To https://github.com/daievan/lab4-201830148-daipanzhu.git
 * [new branch]      判断等价性 -> 判断等价性
```

```
$ git log --graph
* commit bf3484986df36e2b4f0ea60bfa69f4ef20b1e445 (HEAD -> main, origin/main)
| Author: daievan <2265495748@qq.com>
| Date:   Thu Nov 17 20:31:16 2022 +0800
|
|     执行oj程序
|
* commit 5ebaa073a0095e1792728e3cadfb5139e592e765
| Author: daievan <2265495748@qq.com>
| Date:   Thu Nov 17 20:28:36 2022 +0800
|
|     判断等价性
|
* commit c473732b9b52ce760239bcb6206e89e06e65e16d
| Author: daievan <2265495748@qq.com>
| Date:   Thu Nov 17 20:16:04 2022 +0800
|
|     创建oj输入
|
* commit 3404ca98a0e4c3e60a6414ee3aa6fb77fdd89284
  Author: daievan <2265495748@qq.com>
  Date:   Thu Nov 17 19:28:38 2022 +0800

      lab4
```



5.部分疑惑

对于clog函数 由于其特殊性结果无法存至文本文档中 所以按照结果为空进行处理，即其与cout不等价