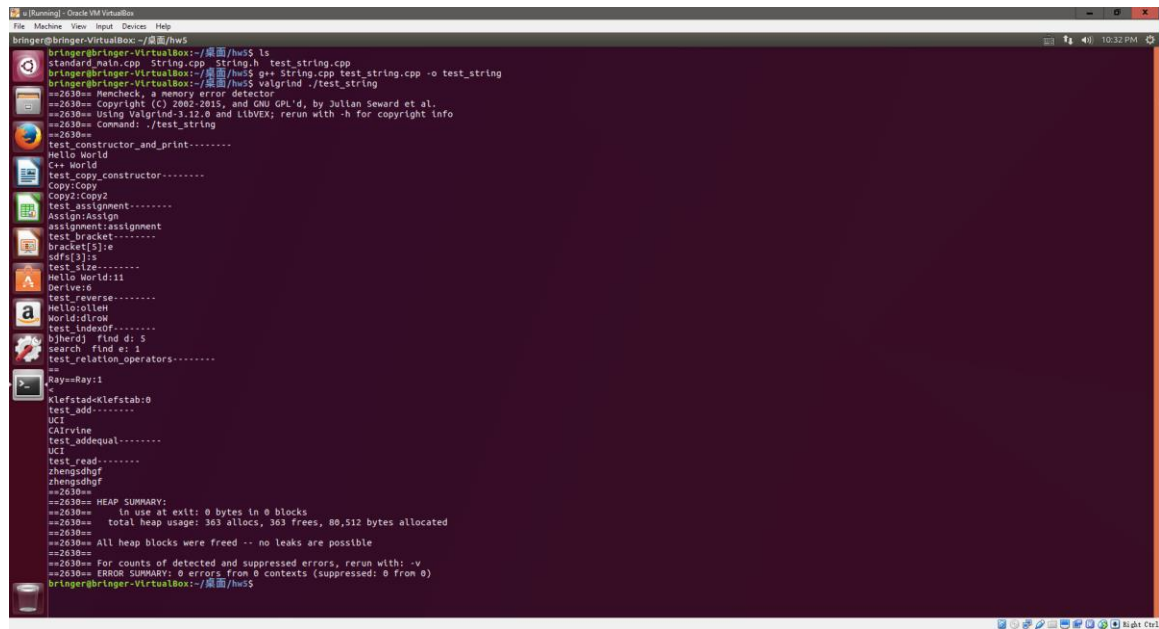


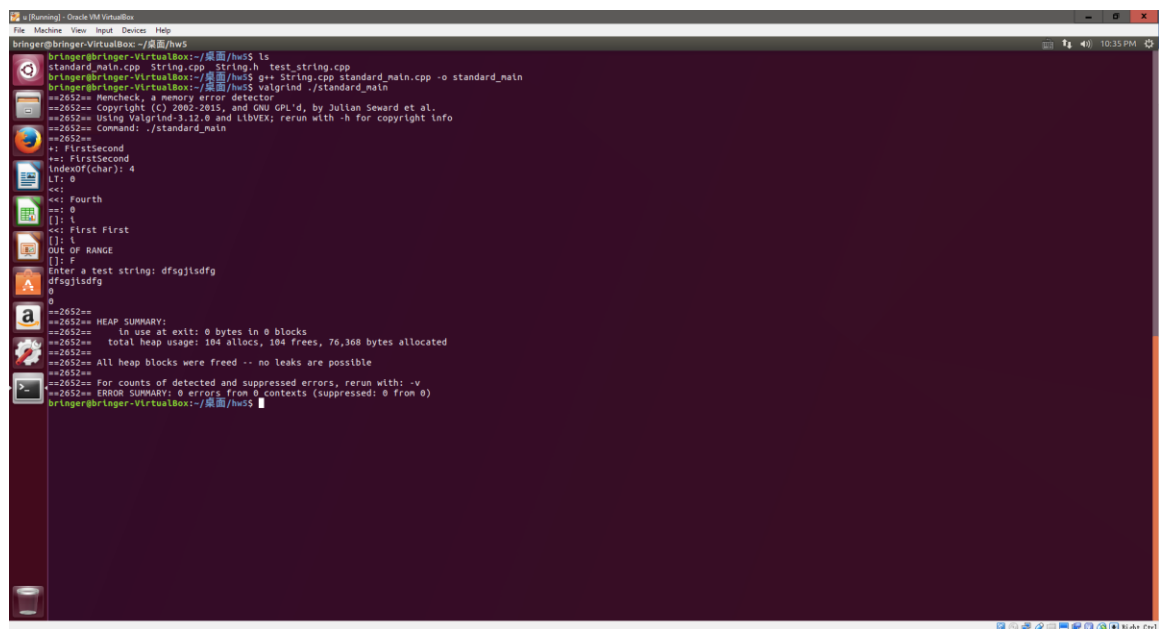
Zhengyi Xu 68996560

Problem 1



```
bringer@bringer-VirtualBox: ~/桌面/hw5
bringer@bringer-VirtualBox:~/桌面/hw5$ ls
standard_main.cpp  string.cpp  string.h  test_string.cpp
bringer@bringer-VirtualBox:~/桌面/hw5$ g++ string.cpp test_string.cpp -o test_string
bringer@bringer-VirtualBox:~/桌面/hw5$ valgrind ./test_string
==2630== Memcheck, a memory error detector
==2630== Copyright (C) 2002-2015, and GNU GPL'd, by Julian Seward et al.
==2630== Using Valgrind-3.12.0 and LibVEX; rerun with -h for copyright info
==2630== Command: ./test_string
==2630==
test_constructor_and_print-----
Hello World
C++ World
test_copy_constructor-----
Copy:Copy
Copy2:Copy2
test_assignment-----
Assign:Assign
assignment:assignment
test_bracket-----
bracket[5]:e
dfgjl[3]:s
test_size-----
Hello World:11
Derive:0
test_reverse-----
Hello:olleH
World:dlrow
test_indexOf-----
bjherd) find d: 5
search find a: 1
test_relation_operators-----
Ray==Ray:1
Klefskd-Klefskd:0
test_add-----
UCI
Caltrine
test_addequal-----
UCI
test_read-----
zhengsdhgf
zhengsdhgf
==2630==
==2630== HEAP SUMMARY:
==2630==   in use at exit: 0 bytes in 0 blocks
==2630==   total heap usage: 363 allocs, 363 frees, 80,512 bytes allocated
==2630==
==2630== All heap blocks were freed -- no leaks are possible
==2630==
==2630== For counts of detected and suppressed errors, rerun with: -v
==2630== ERROR SUMMARY: 0 errors from 0 contexts (suppressed: 0 from 0)
bringer@bringer-VirtualBox:~/桌面/hw5$
```

Problem 2



```
bringer@bringer-VirtualBox:~/桌面/hw5$ ls
standard_main.cpp  string.cpp  string.h  test_string.cpp
bringer@bringer-VirtualBox:~/桌面/hw5$ g++ string.cpp standard_main.cpp -o standard_main
bringer@bringer-VirtualBox:~/桌面/hw5$ valgrind ./standard_main
==2652== Memcheck, a memory error detector
==2652== Copyright (C) 2002-2015, and GNU GPL'd, by Julian Seward et al.
==2652== Using Valgrind-3.12.0 and LibVEX; rerun with -h for copyright info
==2652== Command: ./standard_main
==2652==
+1: FirstSecond
+2: FirstSecond
indexOf(char): 4
LT: 0
<<:
<<: Fourth
==: 0
[]: 1
<<: First First
[]: 1
OUT OF RANGE
[]: F
Enter a test string: dfsgjlsdfg
dfsgjlsdfg
0
==2652==
==2652== HEAP SUMMARY:
==2652==   in use at exit: 0 bytes in 0 blocks
==2652==   total heap usage: 104 allocs, 104 frees, 76,368 bytes allocated
==2652==
==2652== All heap blocks were freed -- no leaks are possible
==2652==
==2652== For counts of detected and suppressed errors, rerun with: -v
==2652== ERROR SUMMARY: 0 errors from 0 contexts (suppressed: 0 from 0)
bringer@bringer-VirtualBox:~/桌面/hw5$
```