

# HW2 Report

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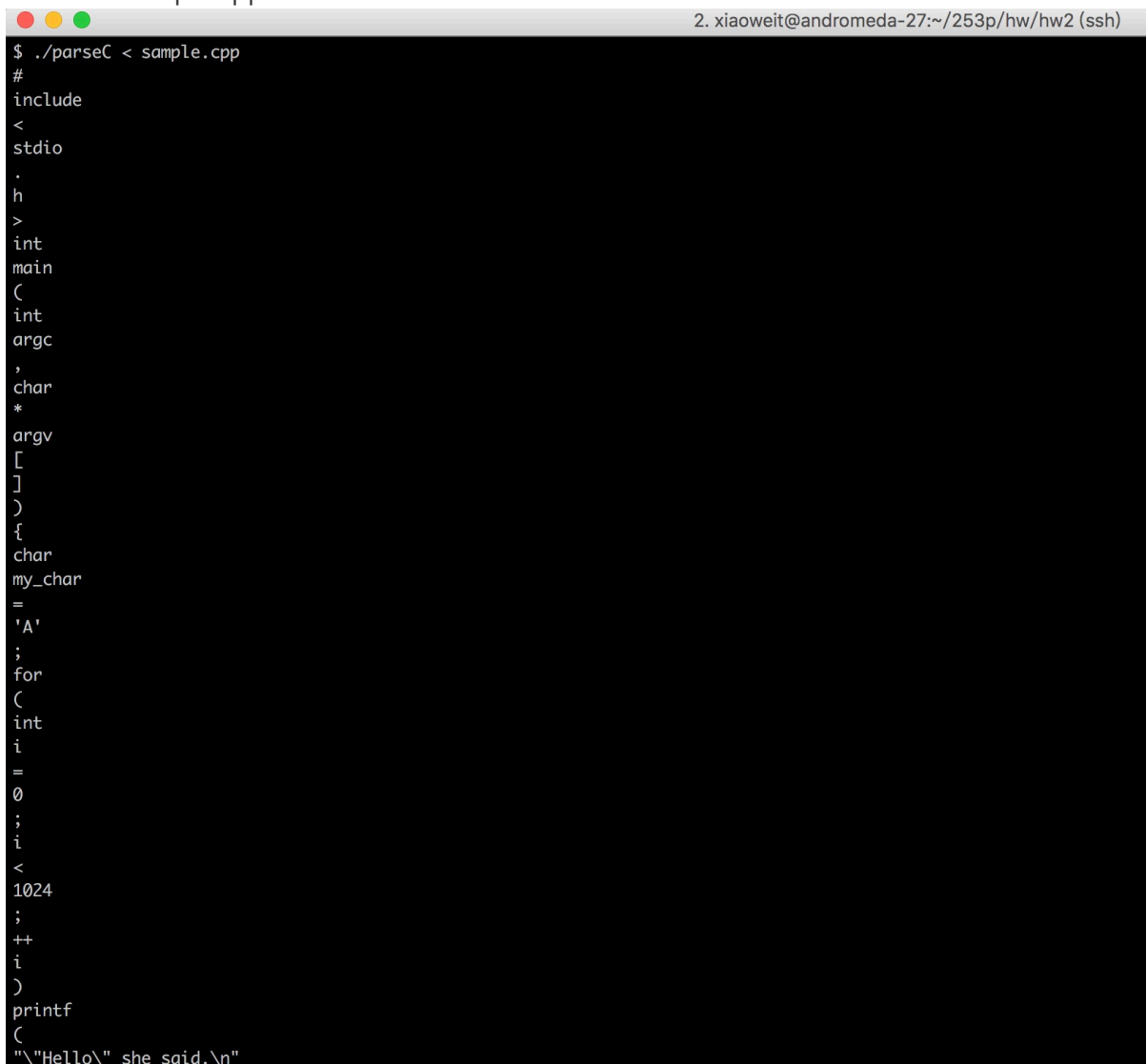
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## Screenshots for tests

### 1. Test for parseC

- Test with sample.cpp

A terminal window with a dark background and light-colored text. The window title bar at the top shows three colored circles (red, yellow, green) on the left and the text '2. xiaoweit@andromeda-27:~/253p/hw/hw2 (ssh)' on the right. The terminal content shows a shell prompt '\$' followed by the command './parseC < sample.cpp'. Below this, the output of the program is displayed as a C code snippet. The code includes a header, defines a main function with argc and argv, and contains a loop that prints a string. The code is as follows:

```
$ ./parseC < sample.cpp
#
include
<
stdio
.
h
>
int
main
(
int
argc
,
char
*
argv
[
]
)
{
char
my_char
=
'A'
;
for
(
int
i
=
0
;
i
<
1024
;
++
i
)
printf
(
"\Hello\" she said.\n"
```

- Test with MusicLibrary.cpp

```
2. xiaoweit@andromeda-27:~/253p/hw/hw2 (ssh) 🔔  
define  
STRMAX  
100  
#  
define  
SONGMAX  
1024  
#  
include  
<  
stdlib  
.  
h  
>  
#  
include  
<  
string  
.  
h  
>  
#  
include  
<  
fstream  
>  
#  
include  
<  
stdio  
.  
h  
>  
#  
include  
<  
iostream  
>  
using  
namespace  
std  
"tokens" 1285L, 5216C
```

## 2. Test for myString

```
2. xiaoweit@andromeda-27:~/253p/hw/hw2 (ssh)  
$ ./myString  
test_strlen pass  
test_strcmp pass  
test_strncmp pass  
test_strcpy pass  
test_strcat pass  
test_strchr pass  
test_strpbrk pass  
test_strspn pass  
test_strstr pass  
test_strtok pass  
xiaoweit@andromeda-27 23:15:43 ~/253p/hw/hw2  
$
```

# Screenshots for Valgrind

## 1. Valgrind for parseC

```
2. xiaoweit@andromeda-27:~/253p/hw/hw2 (ssh)
$ valgrind ./myString < MusicLibrary.cpp > tokens
==14138== Memcheck, a memory error detector
==14138== Copyright (C) 2002-2017, and GNU GPL'd, by Julian Seward et al.
==14138== Using Valgrind-3.13.0 and LibVEX; rerun with -h for copyright info
==14138== Command: ./myString
==14138==
==14138==
==14138== HEAP SUMMARY:
==14138==   in use at exit: 72,704 bytes in 1 blocks
==14138==   total heap usage: 1 allocs, 0 frees, 72,704 bytes allocated
==14138==
==14138== LEAK SUMMARY:
==14138==   definitely lost: 0 bytes in 0 blocks
==14138==   indirectly lost: 0 bytes in 0 blocks
==14138==   possibly lost: 0 bytes in 0 blocks
==14138==   still reachable: 72,704 bytes in 1 blocks
==14138==   suppressed: 0 bytes in 0 blocks
==14138== Rerun with --leak-check=full to see details of leaked memory
==14138==
==14138== For counts of detected and suppressed errors, rerun with: -v
==14138== ERROR SUMMARY: 0 errors from 0 contexts (suppressed: 0 from 0)
xiaoweit@andromeda-27 23:21:59 ~/253p/hw/hw2
$
```

## 2. Valgrind for myString

```
2. xiaoweit@andromeda-27:~/253p/hw/hw2 (ssh) — 181X43
$ valgrind ./myString
==13639== Memcheck, a memory error detector
==13639== Copyright (C) 2002-2017, and GNU GPL'd, by Julian Seward et al.
==13639== Using Valgrind-3.13.0 and LibVEX; rerun with -h for copyright info
==13639== Command: ./myString
==13639==
test_strlen pass
test_strcmp pass
test_strncmp pass
test_strcpy pass
test_strcat pass
test_strchr pass
test_strpbrk pass
test_strspn pass
test_strstr pass
test_strtok pass
==13639==
==13639== HEAP SUMMARY:
==13639==   in use at exit: 72,704 bytes in 1 blocks
==13639==   total heap usage: 1 allocs, 0 frees, 72,704 bytes allocated
==13639==
==13639== LEAK SUMMARY:
==13639==   definitely lost: 0 bytes in 0 blocks
==13639==   indirectly lost: 0 bytes in 0 blocks
==13639==   possibly lost: 0 bytes in 0 blocks
==13639==   still reachable: 72,704 bytes in 1 blocks
==13639==   suppressed: 0 bytes in 0 blocks
==13639== Rerun with --leak-check=full to see details of leaked memory
==13639==
==13639== For counts of detected and suppressed errors, rerun with: -v
==13639== ERROR SUMMARY: 0 errors from 0 contexts (suppressed: 0 from 0)
xiaoweit@andromeda-27 23:16:21 ~/253p/hw/hw2
$
```