

# MAKE GRADE

```
ashhal@DESKTOP-ULR67QV: ~/xv6-labs-2025
$ kernel/spinlock.o
riscv64-linux-gnu-ld: warning: kernel/kernel has a LOAD segment with RWX permissions
riscv64-linux-gnu-objdump -S kernel/kernel > kernel/kernel.asm
riscv64-linux-gnu-objdump -t kernel/kernel | sed '1,/SYMBOL TABLE/d; s/ .* / /; /^$/d' > kernel/kernel.sym
make[1]: Leaving directory '/home/ashhal/xv6-labs-2025'
== Test sleep, no arguments ==
$ make qemu-gdb
sleep, no arguments: OK (5.5s)
== Test sleep, returns ==
$ make qemu-gdb
sleep, returns: OK (1.0s)
== Test sleep, makes syscall ==
$ make qemu-gdb
sleep, makes syscall: OK (1.2s)
== Test sixfive_test ==
$ make qemu-gdb
sixfive_test: OK (1.1s)
== Test sixfive_readme ==
$ make qemu-gdb
sixfive_readme: OK (0.9s)
== Test sixfive_all ==
$ make qemu-gdb
sixfive_all: OK (1.2s)
```

```
ashhal@DESKTOP-ULR67QV: ~/xv6-labs-2025
== Test memdump, examples ==
$ make qemu-gdb
memdump, examples: OK (0.9s)
(Old xv6.out.memdump_examples failure log removed)
== Test memdump, format ii, S, p ==
$ make qemu-gdb
memdump, format ii, S, p: FAIL (1.5s)
...
    init: starting sh
    $ echo abcdefgh12345678 | memdump ii
GOOD 1684234849
GOOD 1751606885
    $ echo abcdefgh12345678 | memdump S
GOOD abcdefgh12345678

    $ echo abcdefgh12345678 | memdump p
0x6867666564636261
    $ qemu-system-riscv64: terminating on signal 15 from pid 3135 (make)
MISSING '^64636261'
QEMU output saved to xv6.out.memdump_examples
```

```
ashhal@DESKTOP-ULR67QV: ~/xv6-labs-2025
== Test find, in current directory ==
$ make qemu-gdb
find, in current directory: OK (1.3s)
== Test find, in sub-directory ==
$ make qemu-gdb
find, in sub-directory: OK (9.6s)
== Test find, recursive ==
$ make qemu-gdb
find, recursive: OK (1.6s)
== Test exec ==
$ make qemu-gdb
exec: OK (1.3s)
== Test exec, multiple args ==
$ make qemu-gdb
exec, multiple args: OK (1.4s)
== Test exec, recursive find ==
$ make qemu-gdb
exec, recursive find: OK (1.8s)
== Test time ==
time: OK
Score: 121/131
make: *** [Makefile:360: grade] Error 1
ashhal@DESKTOP-ULR67QV:~/xv6-labs-2025$
```

## SIXFIVE

```
ashhal@DESKTOP-ULR67QV: ~/xv6-labs-2025
Delta compression using up to 8 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (7/7), 9.00 KiB | 418.00 KiB/s, done.
Total 7 (delta 5), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (5/5), completed with 5 local objects.
To https://github.com/ashhalaamir/OS-LABS.git
  962680b..f61d7f8  problemSet1 -> problemSet1
branch 'problemSet1' set up to track 'origin/problemSet1'.
ashhal@DESKTOP-ULR67QV:~/xv6-labs-2025$ make qemu
mv -f fs.img fs.img.bk
mkfs/mkfs fs.img README user/findtest.sh user/sixfive.txt user/_cat us
r/_kill user/_ln user/_ls user/_mkdir user/_rm user/_sh user/_stressfs
user/_logstress user/_forphan user/_dorphan user/_sleep user/_sixfive
nmeta 47 (boot, super, log blocks 31, inode blocks 13, bitmap blocks 1
balloc: first 1096 blocks have been allocated
balloc: write bitmap block at sector 46
qemu-system-riscv64 -machine virt -bios none -kernel kernel/kernel -m
emory=32M -drive file=fs.img,if=none,format=raw,id=x0 -device virtio
xv6 kernel is booting

hart 2 starting
hart 1 starting
init: starting sh
$ sixfive sixfive.txt
5
100
18
6
$
```

## MEMDUMP

```
ashhal@DESKTOP-ULR67QV: ~/xv6-labs-2025
hart 2 starting
hart 1 starting
init: starting sh
$ sixfive sixfive.txt
5
100
18
6
$ memdump
Example 1:
61810
2025
Example 2:
a string
Example 3:
another
Example 4:
0x00000000000000B80
1819438967
100
z
xyzzy
Example 5:
hello
w
o
r
l
d
$
```

```
ashhal@DESKTOP-ULR67QV: ~/xv6-labs-2025
```

```
$ memdump
Example 1:
61810
2025
Example 2:
a string
Example 3:
another
Example 4:
0x0000000000000B80
1819438967
100
z
xyzzy
Example 5:
hello
w
o
r
l
d
$
$ echo deadc0de | memdump hhcccc
25956
25697
c
0
d
e
$
```

```
ashhal@DESKTOP-ULR67QV: ~/xv6-labs-2025
xyzzy
Example 5:
hello
w
o
r
l
d
$
$ echo deadc0de | memdump hhccc
25956
25697
c
0
d
e
$ echo > b
$ mkdir a
$ echo > a/b
$ mkdir a/aa
$ echo > a/aa/b
$ find .b
Usage: find <dir> <filename> [-exec cmd]
$ find . b
./b
./a/b
./a/aa/b
$ echo deadc0de | memdump p
0x6564306364616564
$
```

## FIND

```
ashhal@DESKTOP-ULR67QV: ~/xv6-labs-2025
100
z
xyzzy
Example 5:
hello
w
o
r
l
d
$
$ echo deadc0de | memdump hhccc
25956
25697
c
0
d
e
$ echo > b
$ mkdir a
$ echo > a/b
$ mkdir a/aa
$ echo > a/aa/b
$ find .b
Usage: find <dir> <filename> [-exec cmd]
$ find . b
./b
./a/b
./a/aa/b
$
```