

UNIQ

Make clean

```
nsh /home/matias/xv6-public
matias@pop-os ~/xv6-public (master)> make clean
Makefile:193: warning: overriding recipe for target 'fs.img'
Makefile:190: warning: ignoring old recipe for target 'fs.img'
rm -f *.tex *.dvi *.idx *.aux *.log *.ind *.ilg \
*.o *.d *.asm *.sym vectors.S bootblock entryother \
initcode initcode.out kernel xv6.img fs.img kernelmemfs \
xv6memfs.img mkfs .gdbinit \
_cat _echo _forktest _grep _init _kill _ln _ls _mkdir _rm _sh _stressfs _user
matias@pop-os ~/xv6-public (master)>
```

Make

```
matias@pop-os ~/xv6-public (master)> make
Makefile:193: warning: overriding recipe for target 'fs.img'
Makefile:190: warning: ignoring old recipe for target 'fs.img'
gcc -fno-pic -static -fno-builtin -fno-strict-aliasing -O2 -Wall -MD -ggdb -mc
gcc -fno-pic -static -fno-builtin -fno-strict-aliasing -O2 -Wall -MD -ggdb -mS
ld -m elf_i386 -N -e start -Ttext 0x7C00 -o bootblock.o bootasm.o bootmain.o
objdump -S bootblock.o > bootblock.asm
objcopy -S -O binary -j .text bootblock.o bootblock
./sign.pl bootblock
boot block is 451 bytes (max 510)
gcc -fno-pic -static -fno-builtin -fno-strict-aliasing -O2 -Wall -MD -ggdb -mc
gcc -fno-pic -static -fno-builtin -fno-strict-aliasing -O2 -Wall -MD -ggdb -mc
10000+0 records in
10000+0 records out
5120000 bytes (5.1 MB, 4.9 MiB) copied, 0.0313037 s, 164 MB/s
dd if=bootblock of=xv6.img conv=notrunc
1+0 records in
1+0 records out
512 bytes copied, 8.6394e-05 s, 5.9 MB/s
dd if=kernel of=xv6.img seek=1 conv=notrunc
393+1 records in
393+1 records out
201416 bytes (201 kB, 197 KiB) copied, 0.00105747 s, 190 MB/s
matias@pop-os ~/xv6-public (master)>
```

Make qemu-nox

- Command line version - works the same in “make qemu”

```
make qemu-nox /home/matias/xv6-public
SeaBIOS (version 1.15.0-1)

iPXE (https://ipxe.org) 00:03.0 CA00 PCI2.10 PnP PMM+1FF8B4A0+1FECB4A0 CA00

Booting from Hard Disk..xv6...
cpu0: starting 0
sb: size 1000 nblocks 941 ninodes 200 nlog 30 logstart 2 inodestart 32 bmap start 58
init: starting sh
$
```

Filename: test

Command: uniq test

```
SeaBIOS (version 1.15.0-1)

iPXE (https://ipxe.org) 00:03.0 CA00 PCI2.10 PnP PMM+1FF8B4A0+1FECB4A0 CA00

Booting from Hard Disk..xv6...
cpu0: starting 0
sb: size 1000 nblocks 941 ninodes 200 nlog 30 logstart 2 inodestart 32 bmap start 58
init: starting sh
$ uniq test
lines 4 lines

single 1

lines 3 lines

line 2

test

ee

$
```

Command: program_name cat test | uniq

```
SeaBIOS (version 1.15.0-1)

iPXE (https://ipxe.org) 00:03.0 CA00 PCI2.10 PnP PMM+1FF8B4A0+1FECB4A0 CA00

Booting from Hard Disk..xv6...
cpu0: starting 0
sb: size 1000 nblocks 941 ninodes 200 nlog 30 logstart 2 inodestart 32 bmap start 58
init: starting sh
$ uniq cat test | uniq
lines 4 lines

single 1

lines 3 lines

line 2

test

ee

$
```

Command: `uniq -c test`

```
make qemu-nox /home/matias/xv6-public
SeaBIOS (version 1.15.0-1)

iPXE (https://ipxe.org) 00:03.0 CA00 PCI2.10 PnP PMM+1FF8B4A0+1FECB4A0 CA00

Booting from Hard Disk..xv6...
cpu0: starting 0
sb: size 1000 nblocks 941 ninodes 200 nlog 30 logstart 2 inodestart 32 bmap start 58
init: starting sh
$ uniq -c test
 4 lines 4 lines
 2
 1 single 1
 2
 3 lines 3 lines
 2
 2 line 2
 1
 1 test
 1
 2 ee
$
```

Command: `uniq -i test`

```
make qemu-nox /home/matias/xv6-public
SeaBIOS (version 1.15.0-1)

iPXE (https://ipxe.org) 00:03.0 CA00 PCI2.10 PnP PMM+1FF8B4A0+1FECB4A0 CA00

Booting from Hard Disk..xv6...
cpu0: starting 0
sb: size 1000 nblocks 941 ninodes 200 nlog 30 logstart 2 inodestart 32 bmap start 58
init: starting sh
$ uniq -i test
lines 4 lines

single 1

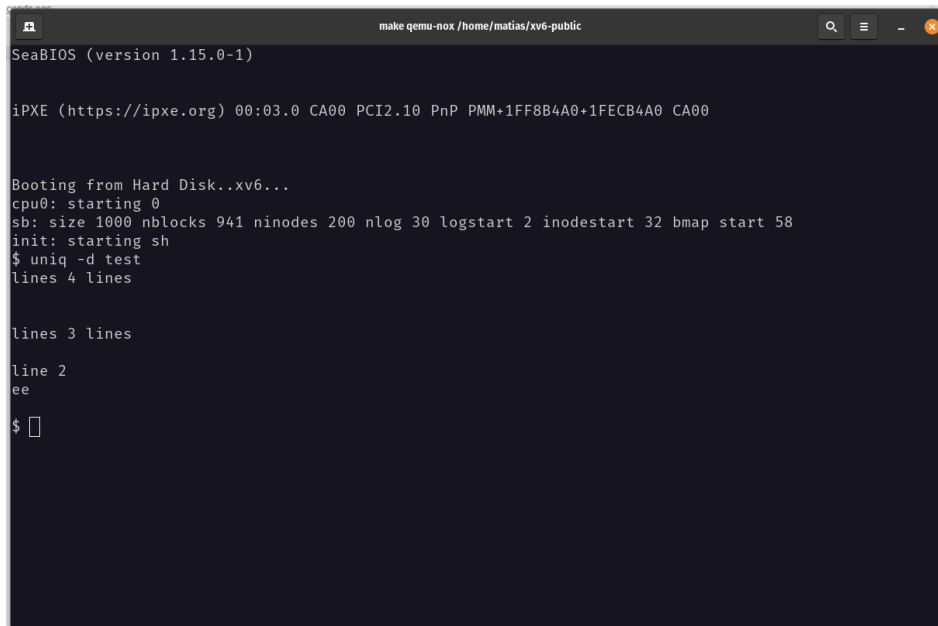
lines 3 lines

line 2

test

ee
$
```

Command: `uniq -d test`



```
SeaBIOS (version 1.15.0-1)

iPXE (https://ipxe.org) 00:03.0 CA00 PCI2.10 PnP PMM+1FF8B4A0+1FECB4A0 CA00

Booting from Hard Disk..xv6...
cpu0: starting 0
sb: size 1000 nblocks 941 ninodes 200 nlog 30 logstart 2 inodestart 32 bmap start 58
init: starting sh
$ uniq -d test
lines 4 lines

lines 3 lines

line 2
ee
$
```