

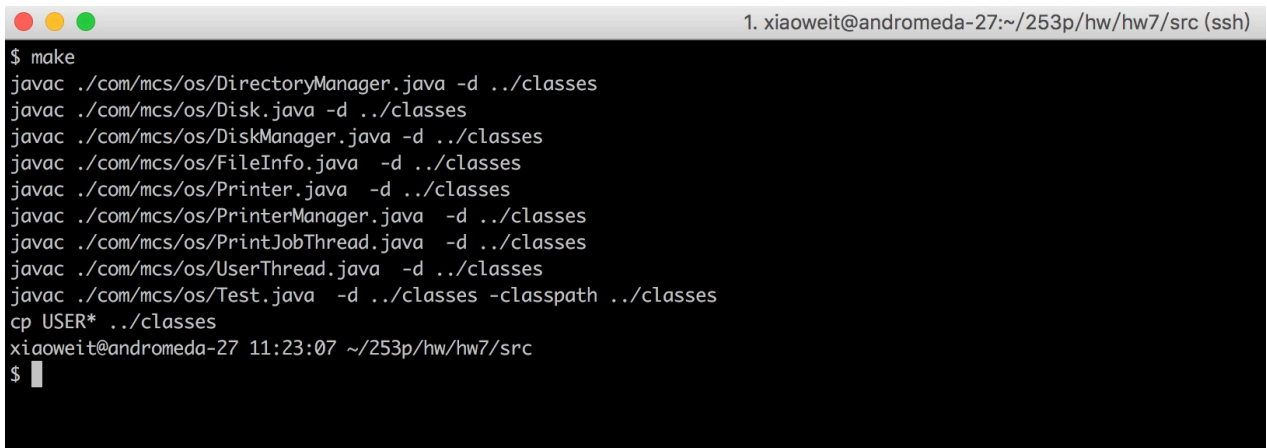
HW7 Report

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Screenshots

Compile

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 '1. xiaowei@andromeda-27:~/253p/hw/hw7/src (ssh)' on the right. The terminal content shows a series of commands being executed in a shell. The first command is '\$ make'. This is followed by nine 'javac' commands, each compiling a specific Java file from the './com/mcs/os/' directory into the './classes' directory. The files are: DirectoryManager.java, Disk.java, DiskManager.java, FileInfo.java, Printer.java, PrinterManager.java, PrintJobThread.java, UserThread.java, and Test.java. The last 'javac' command includes the '-classpath ./classes' option. The final command is 'cp USER* ./classes'. The prompt 'xiaowei@andromeda-27 11:23:07 ~/253p/hw/hw7/src' is shown, followed by a new shell prompt '\$' and a cursor.

```
$ make
javac ./com/mcs/os/DirectoryManager.java -d ../classes
javac ./com/mcs/os/Disk.java -d ../classes
javac ./com/mcs/os/DiskManager.java -d ../classes
javac ./com/mcs/os/FileInfo.java -d ../classes
javac ./com/mcs/os/Printer.java -d ../classes
javac ./com/mcs/os/PrinterManager.java -d ../classes
javac ./com/mcs/os/PrintJobThread.java -d ../classes
javac ./com/mcs/os/UserThread.java -d ../classes
javac ./com/mcs/os/Test.java -d ../classes -classpath ../classes
cp USER* ../classes
xiaowei@andromeda-27 11:23:07 ~/253p/hw/hw7/src
$
```

Running

```
1. xiaoweit@andromeda-27:~/253p/hw/hw7/src (ssh)
Thread-7 starts printing to file PRINTER1, content from file Y2, content=
2.Y4 Y4444444

Thread-8 ends reading from Disk 1, data=
2.Y4 Y4444444

Thread-8 starts printing to file PRINTER2, content from file Y2, content=
2.Y4 Y4444444

Thread-6 ends reading from Disk 1, data=
2.Y9 Y9999999

Thread-6 starts printing to file PRINTER3, content from file Y2, content=
2.Y9 Y9999999

Thread-7 ends printing to file PRINTER1

Thread-7 starts reading from Disk 1, sector=4
Thread-8 ends printing to file PRINTER2

Thread-8 starts reading from Disk 1, sector=4
Thread-6 ends printing to file PRINTER3

Thread-9 starts reading from Disk 1, sector=0
Thread-7 ends reading from Disk 1, data=
2.Y5 Y5555555

Thread-7 starts printing to file PRINTER1, content from file Y2, content=
2.Y5 Y5555555

Thread-8 ends reading from Disk 1, data=
2.Y5 Y5555555

Thread-8 starts printing to file PRINTER2, content from file Y2, content=
2.Y5 Y5555555

Thread-9 ends reading from Disk 1, data=
2.Y1 Y1111111

Thread-9 starts printing to file PRINTER3, content from file Y2, content=
2.Y1 Y1111111

Thread-7 ends printing to file PRINTER1
```

Printer1 Output

```
1. xiaoweit@andromeda-27:~/253p/hw/hw7/src (ssh)
$ cat PRINTER1
1.W1 W1111111
1.W1 W2222222
1.W1 W3333333
1.W1 W4444444
1.W1 W5555555
2.Y1 Y1111111
2.Y2 Y2222222
2.Y3 Y3333333
2.Y4 Y4444444
2.Y5 Y5555555
2.Y6 Y6666666
2.Y7 Y7777777
2.Y8 Y8888888
2.Y9 Y9999999
4.W1 W1111111
4.W2 W2222222
4.W3 W3333333
4.W4 W4444444
4.W5 W5555555
1.X1 X1111111
1.X1 X2222222
1.X1 X3333333
1.X1 X4444444
1.X1 X5555555
4.W1 W1111111
4.W2 W2222222
4.W3 W3333333
4.W4 W4444444
4.W5 W5555555
1.W1 W1111111
1.W1 W2222222
1.W1 W3333333
1.W1 W4444444
1.W1 W5555555
3.BAR1 11111111
3.BAR2 22222222
3.BAR3 33333333
3.BAR4 44444444
3.BAR5 55555555
4.W1 W1111111
4.W2 W2222222
4.W3 W3333333
4.W4 W4444444
4.W5 W5555555
4.Y1 Y1111111
4.Y2 Y2222222
4.Y3 Y3333333
4.Y4 Y4444444
4.Y5 Y5555555
xiaoweit@andromeda-27 11:59:30 ~/253p/hw/hw7/src
$
```

Printer2 Output

```
1. xiaoweit@andromeda-27:~/253p/hw/hw7/src (ssh)
$ cat PRINTER2
1.W1 W1111111
1.W1 W2222222
1.W1 W3333333
1.W1 W4444444
1.W1 W5555555
2.Y1 Y1111111
2.Y2 Y2222222
2.Y3 Y3333333
2.Y4 Y4444444
2.Y5 Y5555555
2.Y6 Y6666666
2.Y7 Y7777777
2.Y8 Y8888888
2.Y9 Y9999999
4.F1 11111111
4.F2 22222222
4.F3 33333333
4.F4 44444444
4.F5 55555555
1.W1 W1111111
1.W1 W2222222
1.W1 W3333333
1.W1 W4444444
1.W1 W5555555
1.Z1 Z1111111
1.Z1 Z2222222
1.Z1 Z3333333
1.Z1 Z4444444
1.Z1 Z5555555
4.X1 X1111111
4.X2 X2222222
4.X3 X3333333
4.X4 X4444444
4.X5 X5555555
1.X1 X1111111
1.X1 X2222222
1.X1 X3333333
1.X1 X4444444
1.X1 X5555555
3.BAR1 11111111
3.BAR2 22222222
3.BAR3 33333333
3.BAR4 44444444
3.BAR5 55555555
xiaoweit@andromeda-27 12:00:43 ~/253p/hw/hw7/src
$ █
```

Printer3 Output

```
$ cat PRINTER3
```

```
2.Y1 Y1111111
2.Y2 Y2222222
2.Y3 Y3333333
2.Y4 Y4444444
2.Y5 Y5555555
2.Y6 Y6666666
2.Y7 Y7777777
2.Y8 Y8888888
2.Y9 Y9999999
2.Y1 Y1111111
2.Y2 Y2222222
2.Y3 Y3333333
2.Y4 Y4444444
2.Y5 Y5555555
2.Y6 Y6666666
2.Y7 Y7777777
2.Y8 Y8888888
2.Y9 Y9999999
3.BAR1 11111111
3.BAR2 22222222
3.BAR3 33333333
3.BAR4 44444444
3.BAR5 55555555
1.Y1 Y1111111
1.Y1 Y2222222
1.Y1 Y3333333
1.Y1 Y4444444
1.Y1 Y5555555
2.Y1 Y1111111
2.Y2 Y2222222
2.Y3 Y3333333
2.Y4 Y4444444
2.Y5 Y5555555
2.Y6 Y6666666
2.Y7 Y7777777
2.Y8 Y8888888
2.Y9 Y9999999
4.X1 X1111111
4.X2 X2222222
4.X3 X3333333
4.X4 X4444444
4.X5 X5555555
```

```
4.Z1 Z1111111
4.Z2 Z2222222
4.Z3 Z3333333
4.Z4 Z4444444
4.Z5 Z5555555
```

```
xiaoweit@andromeda-27 12:01:40 ~/253p/hw/hw7/src
```

```
$ █
```