A SKILLING PROJECT OUTPUT SCREENSHOTS

Submitted towards the professional course

19CS2106A Operating System Design

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## TASK-1 | Shell

osd-190031187@team-osd:~/190031187-xv6

```
SeaBIOS (version 1.11.0-2.el7)


iPXE (http://ipxe.org) 00:03.0 C980 PCI2.10 PnP PMM+1FF94780+1FED4780 C980



Booting from Hard Disk..xv6...
cpu1: starting 1
cpu0: starting 0
sb: size 1000 nblocks 941 ninodes 200 nlog 30 logstart 2 inodestart 32 bmap start 58
init: starting sh
190031187$ ls
.              1 1 512
..             1 1 512
README         2 2 2286
cat            2 3 14480
echo           2 4 13336
forktest       2 5 8160
grep           2 6 16016
init           2 7 14224
kill           2 8 13368
ln             2 9 13308
ls             2 10 16168
mkdir          2 11 13400
rm             2 12 13376
sh             2 13 31064
stressfs       2 14 14324
usertests      2 15 67224
wc             2 16 15144
zombie         2 17 13036
editor         2 18 26800
console        3 19 0
OSD            1 20 48
f1.txt         2 21 16
190031187$ cd OSD
190031187$ pwd
/OSD
190031187$ ls
.              1 20 48
..             1 1 512
f2.txt         2 22 13
190031187$
```

## TASK-2 | editor

osd-190031187@team-osd:~/190031187-xv6

```
Booting from Hard Disk..xv6...
cpu1: starting 1
cpu0: starting 0
sb: size 1000 nblocks 941 ninodes 200 nlog 30 logstart 2 inodestart 32 bmap sta8
init: starting sh
190031187$ editor sample
>>> ins
... input content:hello sample
>>> the contents of the file are:

001|hello sample
002|

>>> help
>>> instructions for use:
--------+-----------------------------------------------------------------
ins-n:  | insert a line after line n
mod-n:  | modify line n
del-n:  | delete line n
ins:    | insert a line after the last line
mod:    | modify the last line
del:    | delete the last line
show:   | enable show current contents after executing a command.
hide:   | disable show current contents after executing a command.
save:   | save the file
exit:   | exit editor
help:   | help info
demo:   | color demo
init:   | initial file
disp:   | display with highlighting
rb:     | rollback the file
--------+-----------------------------------------------------------------
>>> del-1
>>> the contents of the file are:

001|

>>> disp
>>> the contents of the file are:

001|

>>> init
>>> the contents of the file are:
```

```
001|// Create a NULL-terminated string by reading the provided file
002|static char* readShaderSource(const char* shaderFile)
003|{
004|    int flag = 24;
005|    double ways = 100.43;
006|    if ( fp == NULL ) {
007|        return NULL;
008|    }
009|    fseek(fp, 0L, SEEK_END);        //search something
010|    long size = ftell(fp);
011|    fseek(fp, 0L, SEEK_SET);
012|    char* buf = new char[size + 1];
013|    memset(buf, 0, size + 1);       //Initiate every bit of buf as 0
014|    fread(buf, 1, size, fp);
015|    buf[size] = '\0';
016|    fclose(fp);                     // close 'fp' stream.
017|    return buf;
018|    while (flag != 0){
019|        ways = ways + ways * 12;
020|    }
021|    for (int a = 10; a >= 0; a--){
022|        float tmp_value = 20.5;
023|        printf("the real value of variable tmp_value is:%f", tmp_value);
024|        continue;
025|    }
026|}
027|// This is the Example for highlight of C - Language

>>> exit
>>> save the file? y/n
y

>>> saved successfully
190031187$ 190031187$
```

## TASK-3 | ls

osd-190031187@team-osd:~/190031187-xv6

```
SeaBIOS (version 1.11.0-2.el7)


iPXE (http://ipxe.org) 00:03.0 C980 PCI2.10 PnP PMM+1FF94780+1FED4780 C980



Booting from Hard Disk..xv6...
cpu1: starting 1
cpu0: starting 0
sb: size 1000 nblocks 941 ninodes 200 nlog 30 logstart 2 inodestart 32 bmap start 58
init: starting sh
190031187$ cd OSD
190031187$ ls
.               1 20 48
..              1 1 512
f2.txt          2 22 13
190031187$
```

## Porting xv6 with POSIX compliance + VFS + ulibc + ACPI | Task-4

osd-190031187@team-osd:~/190031187-xv6/xv6

```
SeaBIOS (version 1.11.0-2.el7)


iPXE (http://ipxe.org) 00:03.0 C980 PCI2.10 PnP PMM+1FF94780+1FED4780 C980



Booting from Hard Disk...
xv6...
cpu1: starting
cpu0: starting
[init] executing rc.local

Welcome to Xv6!

[init] starting shell
$ ls
.                 1 1 512
..                1 1 512
bin               1 2 560
boot              1 3 32
dev               1 4 112
etc               1 5 64
home              1 6 32
lib               1 7 32
media             1 8 32
mnt               1 9 32
opt               1 10 32
root              1 11 32
sbin              1 12 64
srv               1 13 32
tmp               1 14 32
usr               1 15 112
var               1 16 176
$
```

## Porting xv6 with POSIX compliance + VFS + ulibc + ACPI | Task-4

osd-190031187@team-osd:~/190031187-xv6/xv6

## TASK-5 | Mirrored RAID feature

osd-190031187@team-osd:~/190031187-xv6/task5

```
Booting from Hard Disk..xv6...
lapicinit: 1 0xfee00000
cpu1: starting
cpu0: starting
init: starting sh
190031187$ tester
mirrored fs test
write done
read text = xxxxxxxxx 190031187$
190031187$ write2
Writing A
Writing B
Writing C
Writing D
Writing E
Writing F
Writing G
Writing H
Writing I
Writing J
Writing K
Writing L
Writing M
Writing N
Writing O
Writing P
Writing Q
Writing R
Writing S
Writing T
Writing U
Writing V
Writing W
Writing X
Writing Y
Writing Z
Writing [
Writing \
Writing ]
Writing ^
Writing _
Writing `
Writing a
Writing b
Writing c
```

```
Writing d
Writing e
Writing f
Writing g
Writing h
Writing i
Writing j
Writing k
Writing l
Writing m
Writing n
Writing o
Writing p
Writing q
Writing r
Writing s
Writing t
Writing u
Writing v
Writing w
Writing x
Writing y
Writing z
Writing {
Writing |
Writing }
Writing ~
Writing
Writing
Writing
Writing
Writing
Writing
Writing
Writing
Reading A
Reading B
Reading C
Reading D
Reading E
Reading F
Reading G
Reading H
Reading I
Reading J
Reading K
```

```
Writing L
Writing M
Writing N
Writing O
Writing P
Writing Q
Writing R
Writing S
Writing T
Writing U
Writing V
Writing W
Writing X
Writing Y
Writing Z
Writing [
Writing \
Writing ]
Writing ^
Writing _
Writing `
Writing a
Writing b
Writing c
Writing d
Writing e
Writing f
Writing g
Writing h
Writing i
Writing j
Writing k
Writing l
Writing m
Writing n
Writing o
Writing p
Writing q
Writing r
Writing s
Writing t
Writing u
Writing v
Writing w
Writing x
Writing y
```

```
Writing z
Writing {
Writing |
Writing }
Writing ~
Writing
Writing ▓
Writing ▓
Writing ▓
Writing ▓
Writing ▓
Writing ▓
Reading A
Reading B
Reading C
Reading D
Reading E
Reading F
Reading G
Reading H
Reading I
Reading J
Reading K
Reading L
Reading M
Reading N
Reading O
Reading P
Reading Q
Reading R
Reading S
Reading T
Reading U
Reading V
Reading W
Reading X
Reading Y
Reading Z
Reading [
Reading \
Reading ]
Reading ^
Reading _
Reading `
Reading a
```

```
Reading b
Reading c
Reading d
Reading e
Reading f
Reading g
Reading h
Reading i
Reading j
Reading k
Reading l
Reading m
Reading n
Reading o
Reading p
Reading q
Reading r
Reading s
Reading t
Reading u
Reading v
Reading w
Reading x
Reading y
Reading z
Reading {
Reading |
Reading }
Reading ~
Reading
Reading
Reading
Reading
Reading
Reading
Reading
Reading
TEST PASSED
190031187$
```