

Justin Shuck
CS333 - Fall 2014
Proj 5 - Output

```
#####  
Script started on Sun, Nov  2, 2014  4:02:54 PM
```

```
justin@Justin ~/cs333/p5
```

```
$ make  
kpl Kernel -unsafe  
asm Kernel.s  
lddd Runtime.o Switch.o System.o List.o BitMap.o Kernel.o Main.o -o os
```

```
justin@Justin ~/cs333/p5
```

```
$ blitz -g os  
Beginning execution...  
===== KPL PROGRAM STARTING =====
```

```
Initializing Thread Scheduler...
```

```
Initializing Thread Manager...
```

```
Initializing Frame Manager...
```

```
AllocateRandomFrames called.  NUMBER_OF_PHYSICAL_PAGE_FRAMES = 100
```

```
Initializing Disk Driver...
```

```
Initializing File Manager...
```

```
User-level program 'TestProgram1' is running...
```

```
***** Testing Syscall Parameter Passing *****
```

```
***** About to call Sys_Yield...
```

```
***** Should print:
```

```
*****      Handle_Sys_Yield invoked!
```

```
Handle_Sys_Yield called.
```

```
***** About to call Sys_Fork...
```

```
***** Should print:
```

```
*****      Handle_Sys_Fork invoked!
```

```
Handle_Sys_Fork called.
```

```
***** About to call Sys_Join...
```

```
***** Should print:
```

```
*****      Handle_Sys_Join invoked!
```

```
*****      processID = 1111
```

Handle_Sys_Join called with ProcessID = 1111.

***** About to call Sys_Create...

***** Should print:

***** Handle_Sys_Create invoked!

***** virt addr of filename = 0x0000BFF8

***** filename = MyFileName

Handle_Sys_Create called with Virtual Address = 0x0000BFF8

and filename = 0x00028864.

***** About to call Sys_Open...

***** Should print:

***** Handle_Sys_Open invoked!

***** virt addr of filename = 0x0000BFF8

***** filename = MyFileName

Handle_Sys_Open called with Virtual Address = 0x0000BFF8

and filename = 0x00028864.

***** About to call Sys_Read...

***** Should print:

***** Handle_Sys_Read invoked!

***** fileDesc = 2222

***** virt addr of buffer = 0x0000B0B0

***** sizeInBytes = 3333

Handle_Sys_Read called with fileDesc = 2222, Buffer(Virtual Address) = 0x0000B0B0, sizeInBytes = 3333.

***** ERROR: Bad return value from Sys_Read

return value = 60000

***** About to call Sys_Write...

***** Should print:

***** Handle_Sys_Write invoked!

***** fileDesc = 4444

***** virt addr of buffer = 0x0000B0B0

***** sizeInBytes = 5555

Handle_Sys_Write called with fileDesc = 4444, Buffer(Virtual Address) = 0x0000B0B0, sizeInBytes = 5555.

***** About to call Sys_Seek...

***** Should print:

***** Handle_Sys_Seek invoked!

***** fileDesc = 6666

***** newCurrentPos = 7777

Handle_Sys_Seek called with fileDesc = 6666 and newCurrentPos = 7777.

***** About to call Sys_Close...

***** Should print:

***** Handle_Sys_Close invoked!

***** fileDesc = 8888

Handle_Sys_Close called with fileDes = 8888.

***** About to call Sys_Exit...

***** Should print:

***** Handle_Sys_Exit invoked!

***** returnStatus = 9999

Handle_sys_Exit called with return status = 9999.

***** Syscall Test Complete *****

***** Testing Exec Syscall *****

***** About to call Sys_Exec with a non-existant file...

***** Should print:

***** Okay

Okay

***** About to call Sys_Exec with an overly long file name...

***** Should print:

***** Okay

Okay

***** About to perform a successful Exec and jump to TestProgram2...

***** Should print:

***** User-level program 'TestProgram2' is running!

***** ERROR IN EXEC; return code = -1

FATAL ERROR in UserProgramThread: "Syscall 'Shutdown' was invoked by a user thread" -- TERMINATING!

(To find out where execution was when the problem arose, type 'st' at the emulator prompt.)

===== KPL PROGRAM TERMINATION =====

**** A 'debug' instruction was encountered ****

Done! The next instruction to execute will be:

001078: C0100000 sethi 0x0000,r1 ! 0x00001088 = 4232 (noGoMessage)

Entering machine-level debugger...

```
=====
=====
===== The BLITZ Machine Emulator =====
=====
===== Copyright 2001-2007, Harry H. Porter III =====
=====
=====
```

Enter a command at the prompt. Type 'quit' to exit or 'help' for info about commands.

> q

```
Number of Disk Reads   = 10
Number of Disk Writes  = 0
Instructions Executed   = 1063154
Time Spent Sleeping    = 0
Total Elapsed Time     = 1063154
```

justin@Justin ~/cs333/p5

\$ exit

Script done on Sun, Nov 2, 2014 4:03:03 PM