

P2 Submission

Monday, October 23, 2017 11:24 AM

Compilation

```
sbraich@ada:~/cs510os/p2/src$ make
kpl System -unsafe
asm System.s
kpl List -unsafe
asm List.s
kpl Thread -unsafe
asm Thread.s
asm Switch.s
kpl Synch
asm Synch.s
kpl Main -unsafe
asm Main.s
asm Runtime.s
ldd System.o List.o Thread.o Switch.o Synch.o Main.o Runtime.o -o os
sbraich@ada:~/cs510os/p2/src$
```

Output of Step 5: Part A

```
sbraich@ada:~/cs510os/p2/src$ blitz -g os
Beginning execution...
===== KPL PROGRAM STARTING =====
Example Thread-based Programs...
Initializing Thread Scheduler...

-- You should see 70 lines, each consecutively numbered. --

LockTester-A = 1
LockTester-B = 2
LockTester-C = 3
LockTester-C = 4
LockTester-C = 5
LockTester-C = 6
LockTester-C = 7
LockTester-C = 8
LockTester-D = 9
LockTester-D = 10
LockTester-D = 11
LockTester-E = 12
LockTester-A = 13
LockTester-C = 14
LockTester-D = 15
LockTester-F = 16
LockTester-B = 17
LockTester-G = 18
LockTester-A = 19
LockTester-C = 20
LockTester-E = 21
LockTester-D = 22
LockTester-F = 23
LockTester-G = 24
LockTester-B = 25
LockTester-C = 26
LockTester-A = 27
LockTester-D = 28
LockTester-F = 29
LockTester-G = 30
LockTester-E = 31
LockTester-C = 32
LockTester-A = 33
LockTester-D = 34
LockTester-B = 35
LockTester-F = 36
LockTester-G = 37
LockTester-A = 38
LockTester-D = 39
LockTester-E = 40
LockTester-F = 41
LockTester-G = 42
LockTester-B = 43
LockTester-D = 44
LockTester-A = 45
LockTester-F = 46
LockTester-E = 47
```

```
LockTester-B = 42
LockTester-B = 43
LockTester-D = 44
LockTester-A = 45
LockTester-F = 46
LockTester-E = 47
LockTester-G = 48
LockTester-D = 49
LockTester-A = 50
LockTester-F = 51
LockTester-B = 52
LockTester-G = 53
LockTester-E = 54
LockTester-F = 55
LockTester-A = 56
LockTester-G = 57
LockTester-B = 58
LockTester-F = 59
LockTester-A = 60
LockTester-G = 61
LockTester-E = 62
LockTester-F = 63
LockTester-B = 64
LockTester-G = 65
LockTester-E = 66
LockTester-B = 67
LockTester-E = 68
LockTester-B = 69
LockTester-E = 70
```

Output of Step 5: Part A

```
sbraich@ada.cs.pdx.edu
LockTester-B = 67
LockTester-E = 68
LockTester-B = 69
LockTester-E = 70

**** A 'wait' instruction was executed and no more interrupts are scheduled.
.. halting emulation! ****

Done! The next instruction to execute will be:
000EC8: 09000000    ret
Number of Disk Reads    = 0
Number of Disk Writes   = 0
Instructions Executed    = 404461
Time Spent Sleeping     = 0
Total Elapsed Time      = 404461
sbraich@ada:~/cs510os/p2/src$
```

Output of Step 6: Part A

```

sbraich@ada.cs.pdx.edu
sbraich@ada:~/cs510os/p2/src$ blitz -g os
Beginning execution...
===== KPL PROGRAM STARTING =====
Example Thread-based Programs...
Initializing Thread Scheduler...
Producer-A      A
A      Producer-B      B
AB     Producer-B      B
ABB    Producer-B      B
ABBB   Producer-C      C
ABBBB  Consumer-2      |      A      B
BBBC   Consumer-3      |      B      B
BBC    Consumer-1      |      C      B
BC     Consumer-3      |      C
C      Consumer-2      |
D      Producer-D      D      E
DE     Producer-E      |
DEA    Producer-A      A      B      C
DEAB   Producer-C      |
DEABC  Consumer-3      |      D
EABC   Consumer-1      |      E      A      B
ABC    Consumer-2      |      C
BC     Consumer-3      |      D      E
C      Producer-D      |      C
CD     Consumer-1      |      D      E
D      Producer-E      |      B      A      C
DE     Producer-B      A      C      D      E
DEB    Producer-A      |      D      E      A
DEBA   Consumer-2      |      C      D      E
EBA    Producer-C      |      D      E      A
EBAC   Consumer-3      |      C      D      E
BAC    Consumer-1      |      D      E      A
AC     Consumer-2      |      C      D      E
C      Producer-D      |      D      E      A
CD     Consumer-3      |      C      D      E
D      Producer-E      |      D      E      A
DE     Producer-A      A      C      D      E
DEA    Producer-C      |      D      E      A
DEAC   Consumer-1      |      C      D      E
EAC    Producer-D      |      D      E      A
EACD   Consumer-2      |      C      D      E
ACD    Consumer-3      |      D      E      A
CD     Consumer-1      |      C      D      E
D      Producer-E      |      D      E      A
DE     Consumer-2      |      C      D      E
E      Producer-A      A      C      D      E
EA     Producer-C      |      D      E      A
EAC    Producer-D      |      C      D      E
EACD   Producer-E      |      D      E      A
EACDE  Consumer-1      |      C      D      E
ACDE   Consumer-3      |      D      E      A
CDE    Consumer-2      |      C      D      E
DE     Consumer-1      |      D      E      A
E      Consumer-3      |      C      D      E

```

Output of Step 6: Part B

```

sbraich@ada.cs.pdx.edu
CDE    Consumer-2      |      C
DE     Consumer-1      |      D      E
E      Consumer-3      |

**** A 'wait' instruction was executed and no more interrupts are scheduled.
on! ****

Done! The next instruction to execute will be:
000EC8: 09000000      ret
Number of Disk Reads   = 0
Number of Disk Writes  = 0
Instructions Executed   = 258845
Time Spent Sleeping    = 0
Total Elapsed Time     = 258845
sbraich@ada:~/cs510os/p2/src$

```

Output of Step 6: Part A