

Requirements of submission:

Please submit a tar.gz file. <cs_id_1>_<cs_id_2>_lab1.tar.gz

After unzip, it should have three files:

1. report (pdf, no handwriting)-- how to run, number of test cases, explanation of your test cases, screen shots (for each part). If you used my test case, you don't need to explain too much.
2. xv6_part1 -- this is the first part of lab1.(xv6 folder)
3. xv6_part2 -- this is the second part of lab1. (new version of xv6). (xv6 folder)

You can combine 2 and 3 to one xv6, then you should mention it in your report.

Note:

NO HANDWRITING report!!! I will NOT grade if you use image of handwriting report!

If your code doesn't compile, it will be 0. So make sure your code compiles.

How to Run:

1. Unpack the tar.gz file
2. Enter the extracted folder and then enter the xv6-master folder
3. Type in the following before pressing "Enter": "make clean qemu-nox"
4. The submission should compile and run

All test cases provided were implemented to run start qemu and run any of the following commands:

Wait_one - Tests if one process is capable of waiting for a process with given PID

Wait_more - Just like wait_one but with more processes waiting for one PID

Priority_test - Tests to see if priority affects execution order

Priority_test2 - same as priority_test but with two processes running under priority

```
$ wait_one
pid = 5
pid = 6
pid = 7
pid = 9
pid = 10
pid = 11
pid = 12
pid = 13
pid 13 waiting for 8
pid = 14
pid = 15
pid = kill 4
pid = 17
pid = 18
pid = 19
kill 5
kill 6
kill 7
kill 9
kill 10
kill 11
kill 12
kill 14
kill 15
kill 17
kill 18
kill 19
16
kill 16
pid = 8
success clean 8, status is 0
kill 13
kill -1
$
```

```
$ wait_more
pid = 22
pid = 23
pid = 24
pid = 26
pid = 27
pid = 28
pid = 29
pid = 30
pid 30 waiting for 25
pid = 31
pid = pid = 33
pid = 34
pid = 35
32
pid 32 waiting for 25
pid = 36
kill 21 process
kill 22 process
kill 23 process
kill 24 process
kill 26 process
kill 27 process
kill 28 process
kill 29 process
kill 31 process
kill 33 process
kill 34 process
kill 35 process
kill 36 process
pid = 25
success clean 25
no more waiting for 25
kill 30 process
kill 32 process
kill -1 process
$
```

```
$ priority_test
pid = 45, get higher priority

[45] I should be done first
[42] done runing
[38] done runing
[39] done runing
[40] done runing
[41] done runing
[44] done runing
[46] done runing
[47] done runing
[48] done runing
[43] done runing
[-1] done runing
$
```

```
$ priority_test2
pid = 54, get higher priority

[54] I should be done first two
pid = 57, get higher priority

[57] I should be done first two
[50] done runing
[51] done runing
[52] done runing
[53] done runing
[56] done runing
[58] done runing
[60] done runing
[59] done runing
[55] done runing
[-1] done runing
$
```

*xv6 part 1 and part 2 of the lab are in the same folder: xv6-master