

2. cpu.c example

```
$ make
gcc -o cpu cpu.c -Wall
gcc -o mem mem.c -Wall
gcc -o threads threads.c -Wall -pthread
gcc -o io io.c -Wall
$ cat -n ostep/code/intro/cpu.c
 1  #include <stdio.h>
 2  #include <stdlib.h>
 3  #include "common.h"
 4
 5  int main(int argc, char *argv[])
 6  {
 7      if (argc != 2) {
 8          fprintf(stderr, "usage: cpu <string>\n");
 9          exit(1);
10      }
11      char *str = argv[1];
12
13      while (1) {
14          printf("%s\n", str);
15          Spin(1);
16      }
17      return 0;
18  }
$ ./cpu abc
abc
abc
abc
^C
$
```

```
$ ./cpu A & ./cpu B & ./cpu C & ./cpu D &
[1] 3153
[2] 3154
[3] 3155
[4] 3156
$A
B
D
C
A
B
D
C
A
B
D
C
...
kill %1 %2 %3 %4
[1] Terminated ./cpu A
[2] Terminated ./cpu B
[3]- Terminated ./cpu C
[4]+ Terminated ./cpu D
$
```

--> sleep() instead of Spin()