Projects

Linux
→ Background

→ Overview

→ Suggestions

xv6
→ Code walkthroughs

→ examples

→ All projects to be done on CS2

Hello world;
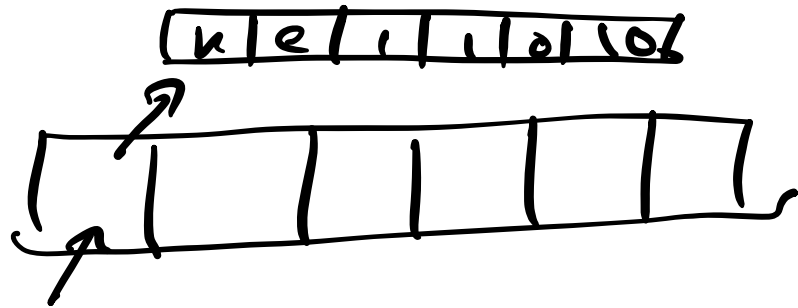
char [6] =

```
| h | e | l | l | o | \0 |
```

↑
char* (or &e[1])

↑
end

char* argv[ ] → char **argv

k	e	1	1	0	0

Char **argv

Clor **argv

Submitting :

/path / to / turnin / login /

P1   P2   ...

on time   slp1   slp2
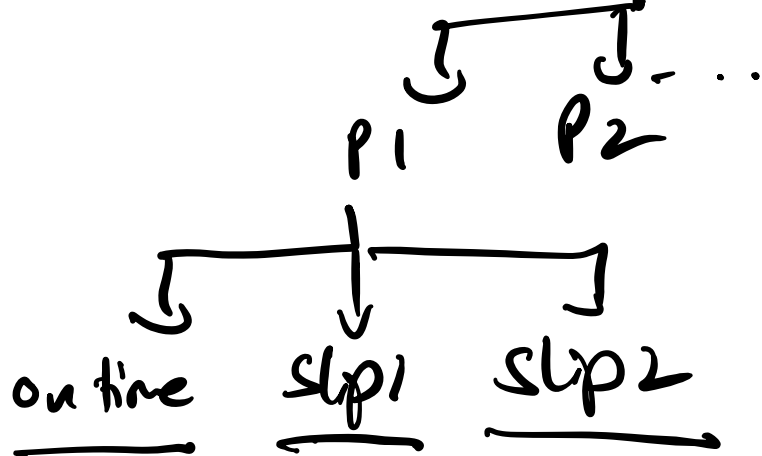
→ Makefiles

→ Run the linder

→ Run valgrind

Office hows :

→ Debugging before coming
   to OH

→ 10-15 mins per person

Technical difficulties:
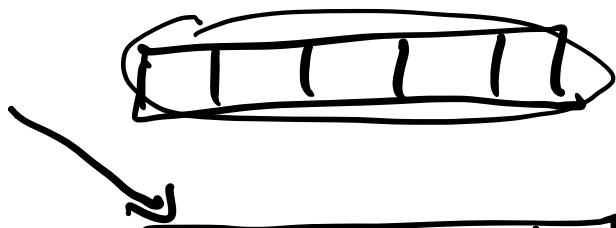
→ Release a recorded discussion
   video (by 5 pme
                    on Tuesday)

Part 2

Memory Leaks:

1) Free all alloc'd memory

2) Avoid orphaned memory locations

   old_val →

new-val → [| | | | | |]

3) Handle pointers returned by functions

Debugging (gdb):

```
          ┌──────────────┐
          │     ret      │
grandma   ├──────────────┤
          │     EBP      │
          ├──────────────┤  ] 10
          │     name     │
ESP →     └──────────────┘  ]
```

[h | e | l | l | o | \0 |

name
     ＼
      ＼
argv[1] → [h | |