CS 208

Mon, 20 Feb 2023
```c
malloc

p = malloc(zillion)

free(p);

heap
data structure

zillion bytes

forget -> memory leak
```
fd = open("File.txt", "RD_ONLY")
```

```
Close(fd).
```

```
-- forget -- weird problems
```
Fork creates a process data structure

1. child runs
2. child terminates
3. OS does not immediately discard

why not? parent might need the child's exit status.

Only discards child if wait gets called by parent.
Data structure for the pipe includes a buffer.
Command A writes to buffer.
Command B reads from buffer.
Output fills buffer?
Command A goes to sleep.
Input empty?
Command B goes to sleep.
Weird thing

```c
int pid1 = fork();
int pid2 = fork();
```

Diagram:
- Parent fork
- Child 1 (c1)
- Child 2 (c2)
- Child 3 (c3)