

# CS 326-02 Project01 Dev Test

## Logistics

Lab Wed Project01 help

Lec Thu Project01 Q<sup>c</sup> & A and advanced heap management

Reading xub book ch 1 & ch 2.

Project01 Mon 11:59 Feb 27

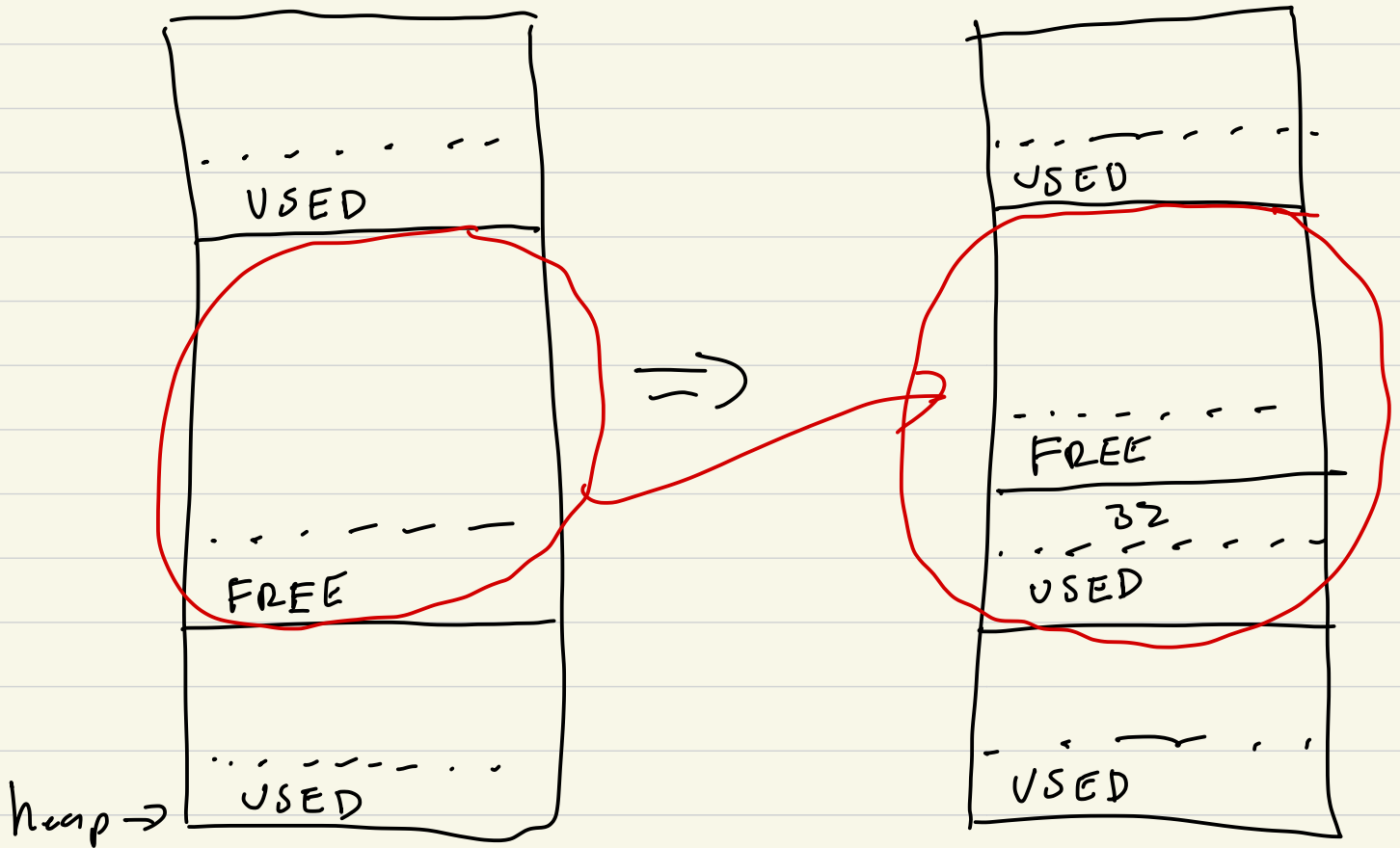
Interactive Grading Tue Feb 28.

## Tips

1) commit early and often  
and push

2) Ensure repo is pushed properly

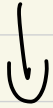
malloc(32)



---

memtest	cmd	size	name	
memtest	m 0	1000	Ap	f 0
	↑			↑
	index			free

0x AA



A

10

0b 1010

↑ ↑

$$8 + 2 = 10$$

0b 10101010

0x 55



5

0b 0101

$$4 + 1 = 5$$

0b 01010101

---

void \*p; → can't dereference  
↑

int \*ip;

char \*cp;

void \*malloc (int nbytes);

struct node {

int x;

int y;

};

struct node \*np;

np = (struct node \*) malloc(sizeof(struct node));

np->x = 3;

---

pointer arithmetic

void \*heap;

void \*p;

heap = sock(4096);

~~##~~

hp = (struct block\_hdr \*)heap;

⋮

p = heap + sizeof(struct block\_hdr);

---

struct block\_hdr \*hp;

hp = hp + 10;

↓

10 \* sizeof(struct block\_hdr)

hp →

32

names should snake case : malloc\_name

Camel case : MallocName

---

memset m 0 3000 A0 P

4096

