

CS 326 Lab Project 01 Tests 5-10

gdb usage

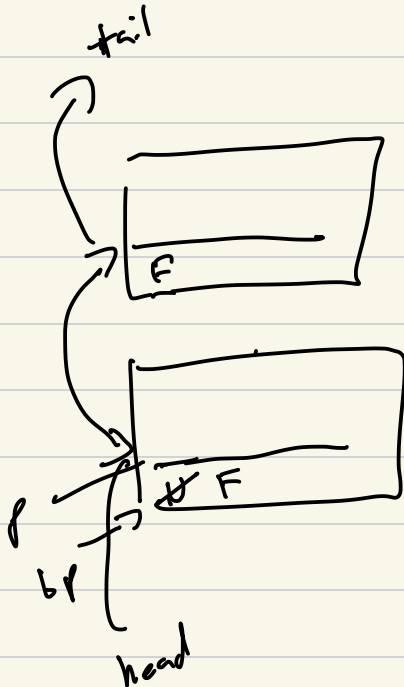
block merging

project01 check in / help

project01 work

lab02 practice problems

Block merging



free(p)

1

bp

bp → used = 0

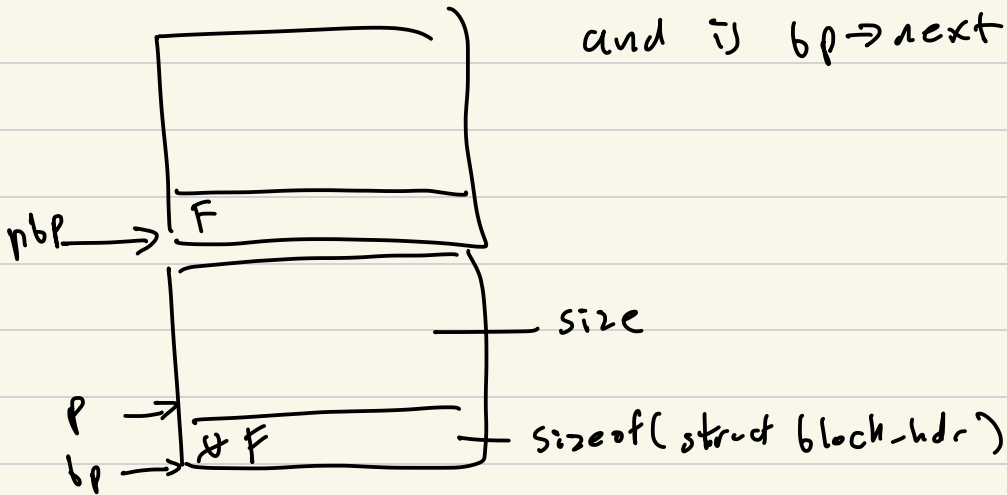
merge (bp, bp → next)

below

above

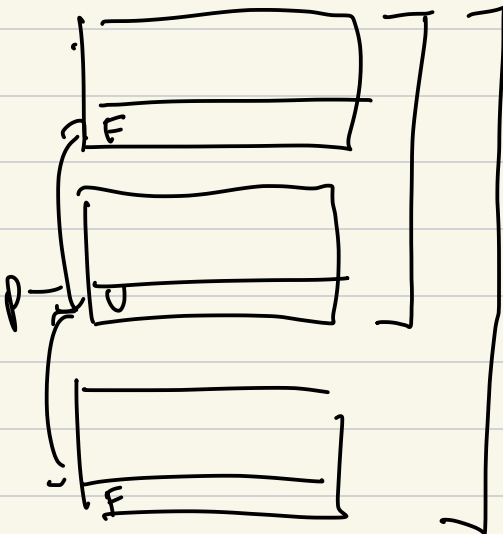
Q1 is bp free

and i) $bp \rightarrow next$ free



Q2

$$nbp == bp + \text{sizeof}(\text{struct block_hdr}) + bp \rightarrow \text{size}$$



free(p)

merge(bp, bp → next)

merge(bp → prev, bp)
below above

If Q1 == yes

Q2 == yes

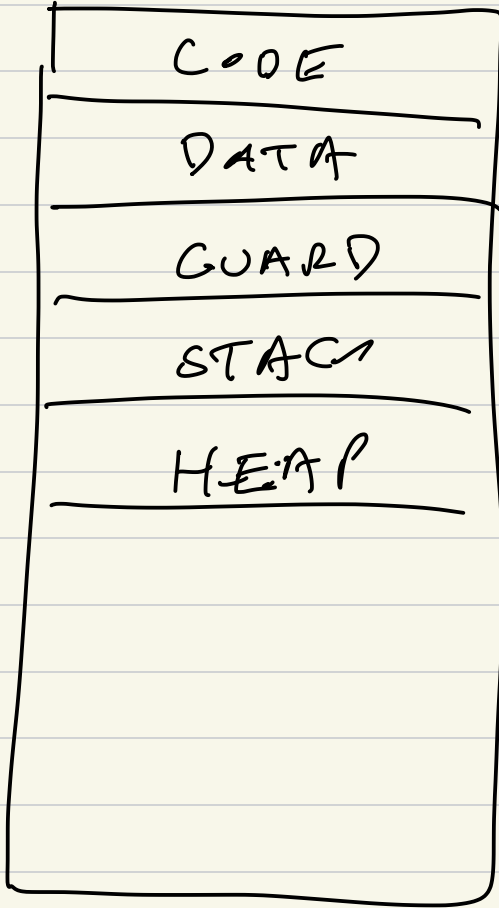
$b_{p+1} = b_p \rightarrow \text{next}$

① remove $b_p \rightarrow \text{next}$
from block-list

② adjust $b_p \rightarrow \text{size}$

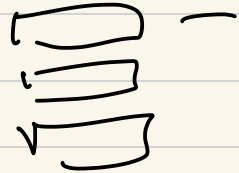
$$b_p \rightarrow \text{size} = b_p \rightarrow \text{size} + \\ \text{sizeof}(\text{struct block_hdr}) + \\ b_{p+1} \rightarrow \text{size}$$

0



main() →

→



128
MB