line 37
changes

41 | 16
17

2 4 | 2··

size = 12
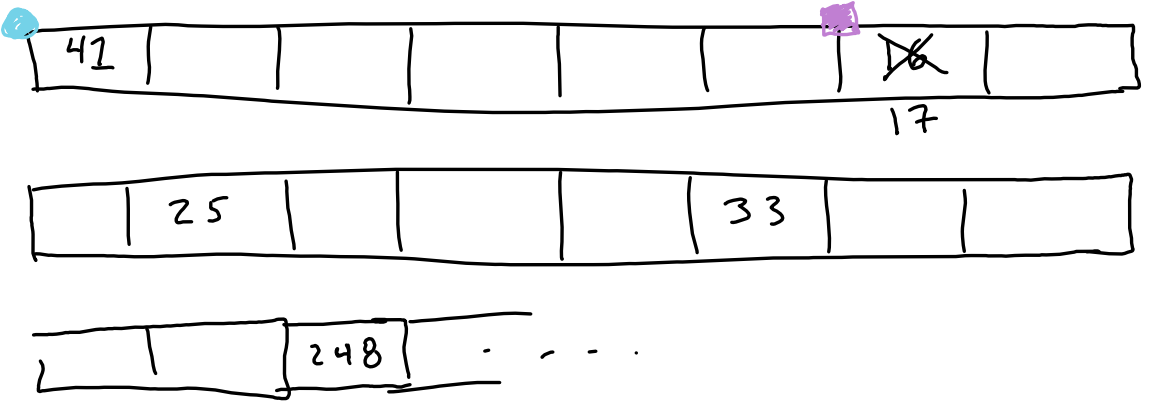current = ●
cur_header = 16   0b10000   0x10
    cur_header % 2 == 0   ✓
cur_size = 16   size ≤ cur_size ✓

rounded = 16
remaining = 16 - 24   -8 or $(2^{64} - 1) - 8$

* current = rounded +1

| 41 | | | | | | | ☒ | |

17

| | 25 | | | | 33 | | |

| | | 248 | . . . . |

my-malloc(12)   VAL_SIZE = 8

Size = 12

Current = 🔷 🟪

cur_header = 16   0b10000   0x10

cur_size = 16

rounded = 16

remaining = 16 - (16 + 8) = -8

| cur_size | | | | new_free | . . . |

header for busy block

size

how much extra space (remaining)
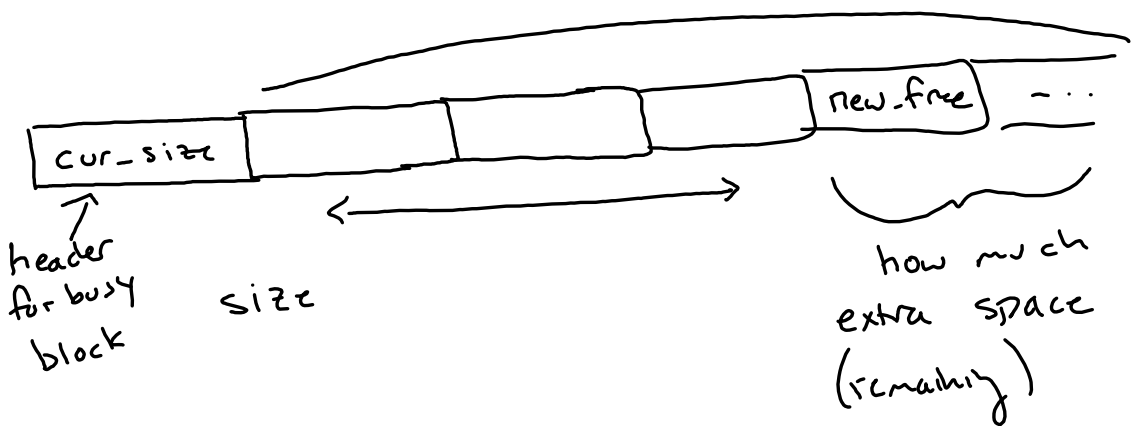
* current = rounded +1
b[0]

| 41 | | | | | | | ☒ | |

9

b[1]

| | 25 | | | | 33 | | |

| | | 248 | . . . . |
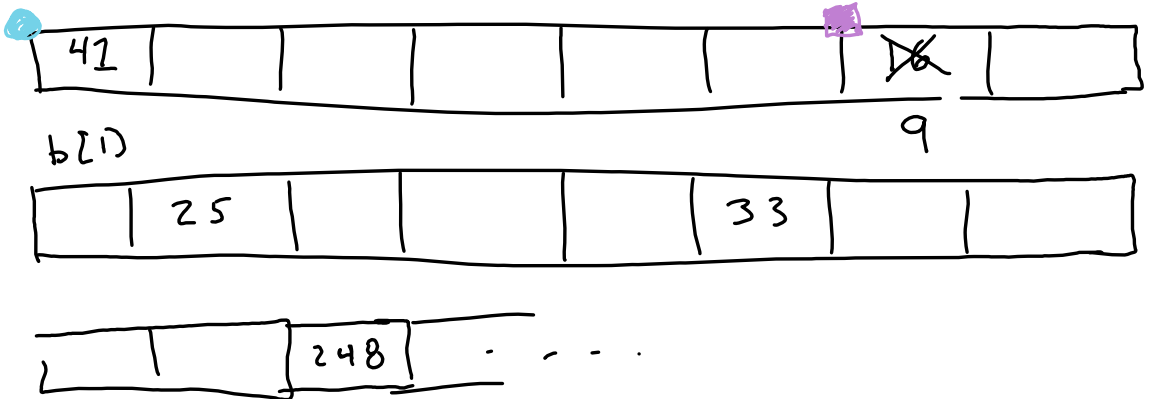
Design Choices
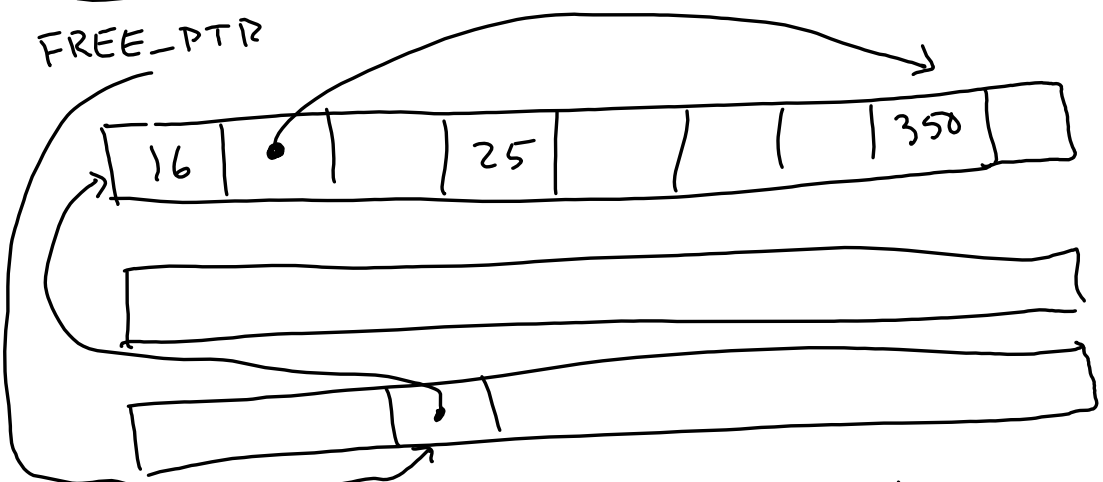
Searching:
- Best fit
- first fit

Coalescing:
- in malloc (while searching)
- in free (after free)

FREE_PTR

| | 16 | | | | 25 | | | | 350 | |

Embed a linked list in the heap!