CS 208

W, 10 Jan 2024

$0x1CD = 256 \times 1 + 16 \times 12 + 1 \times 13$

1 C D

16^2's 16^1's 1's

256's

$= 256 + 192 + 13$

$= 461$

50 ⟶ 0x ?

how many 16's? 3 $(3 \times 16 = 48)$

$3 \times 16 + 2 \times 1$

$= 50$

0x32

50 ⟶ 0b ?

64's ? 0

32's ? 1

16's ? 1

8's ? 0

4's ? 0

2's ? 1

1's ? 0

0b0110010

50 - 32 = 18

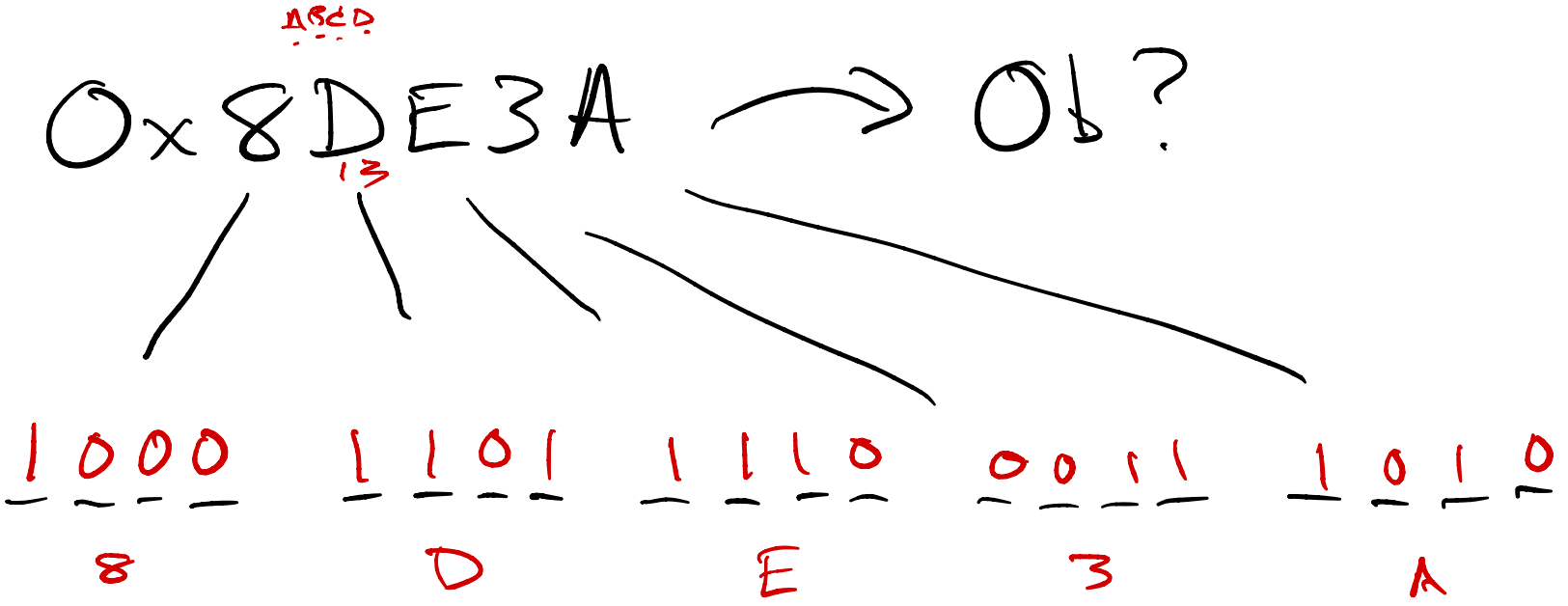
- 16 = 2

- 2 = 0

$0b10111 \longrightarrow ?$ 23

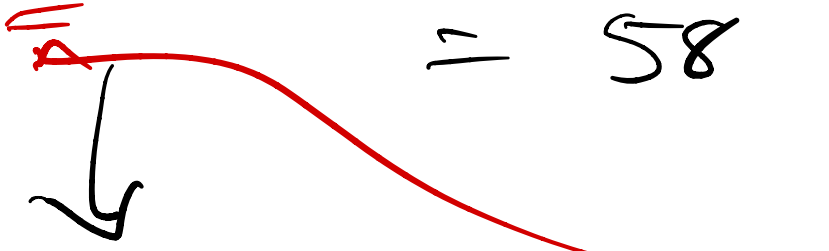
16 8 4 2 1

16+0+4+2+1


0x8DE3A
ABCD
13
1000 1101 1110 0011 1010
8 D E 3 A

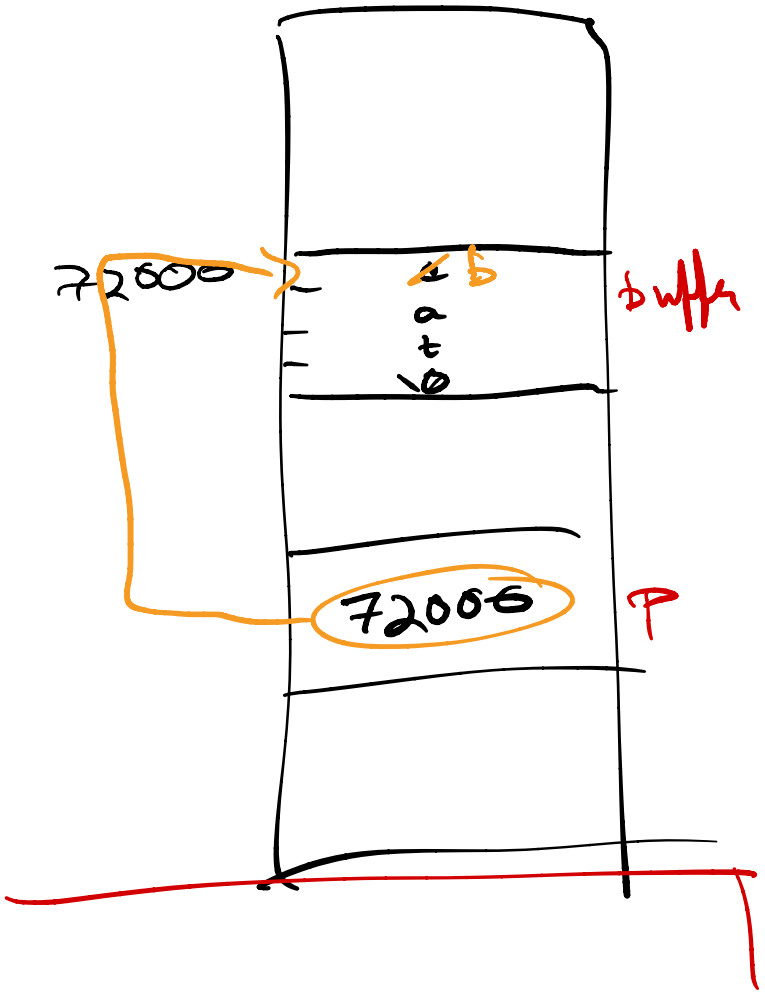
Octal : base 8

$$0\,72 = 7 \times 8 + 2 \quad ?$$
$$= 58$$



tells the C compiler this is octal

0b 1 1 1 0 1 0




```
char buffer[4] = "cat";
char *p = buffer;
```


```
*p = 'b';
```

the thing pointed to by p

```
char buffer[4] = "cat";
buffer = 'b';
```

← compile error

char * const

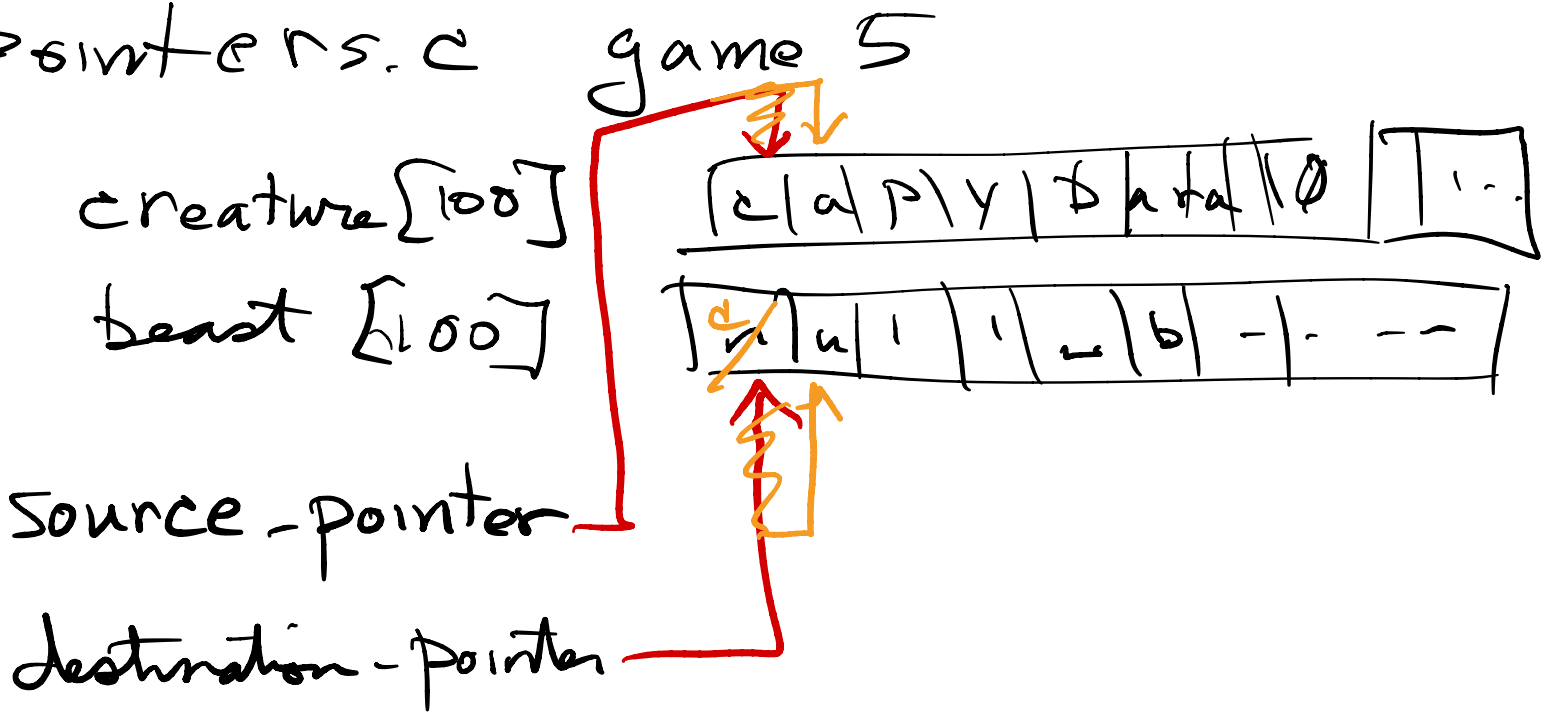
char

```
*buffer = 'b';
```

← OK

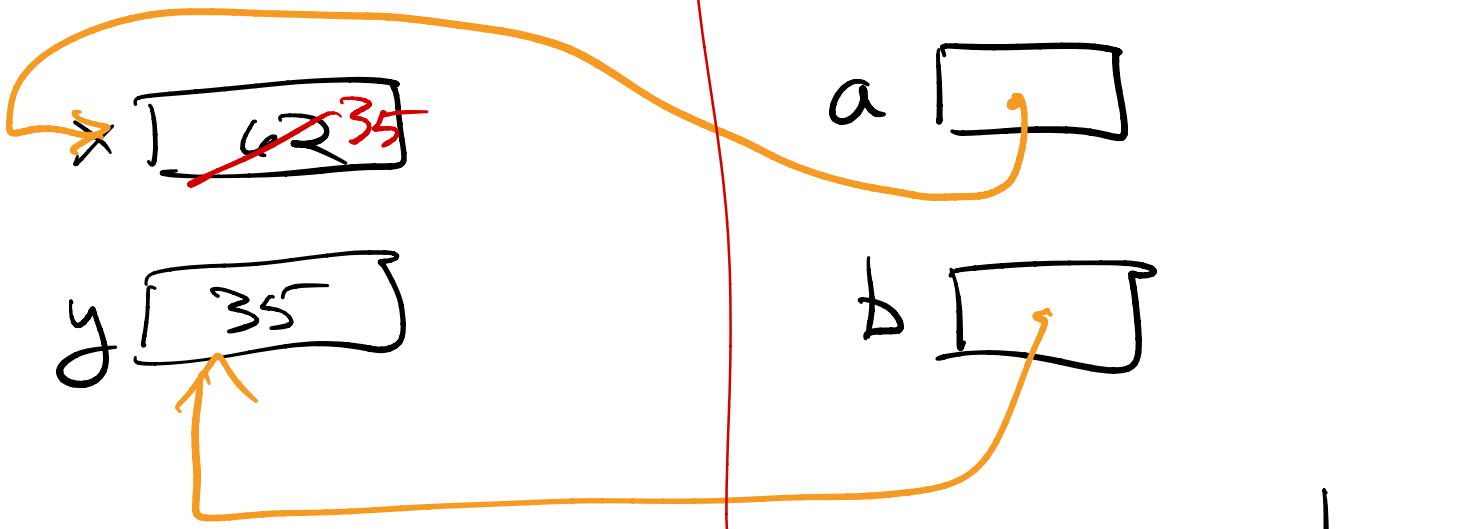
```
buffer[0] = 'b';
```

pointers.c


game 5
creature[100]
beast[100]
source_pointer
destination_pointer
c a p y D a t a \0
u l l b

```
int x = 62;
int y = 35;
```

```
swap_integers
(int *a, int *b)
```




```
*a = *b;
```