

CS 20F

Wed 25 Jan 2023

char s1[12];

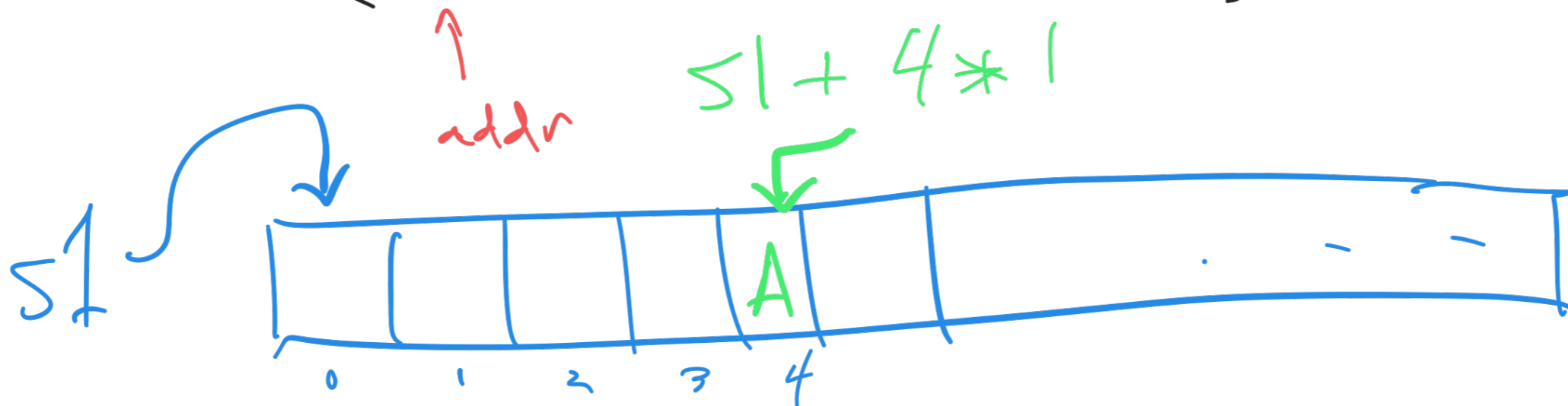
sets aside 12 bytes

s1 is a pointer to
the first of those bytes

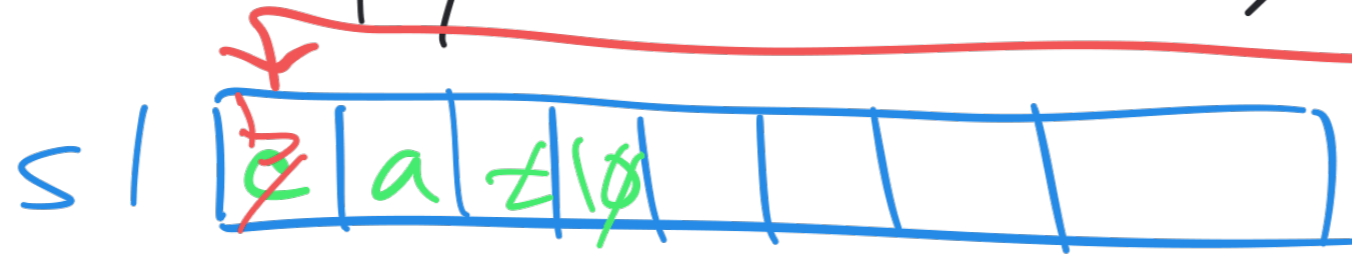
sizeof(char)
↓ = 1

s1[4] = 'A';

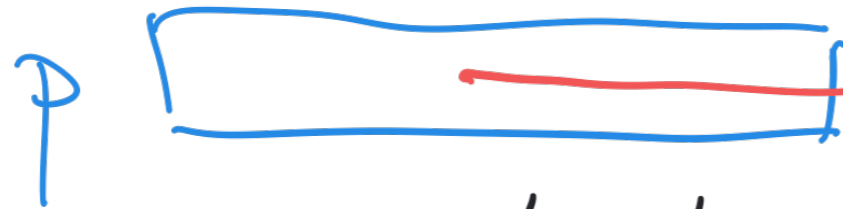
$\ast(s1 + 4 \ast \text{sizeof}(\text{char})) = \text{'A'}$;



```
char s1[12];  
strcpy(s1, "cat");
```



```
char *p = s1;
```



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

`*p` ~ type `char`

`'b'` ~ type `char`

`"b"` ~ type `char*`

```
char s1[12];  
strcpy(s1, "cat");
```



```
char *p = s1;
```



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

```
p++;
```

```
*p = 'i';
```

```
s1++;  
*s1 = 'i';
```

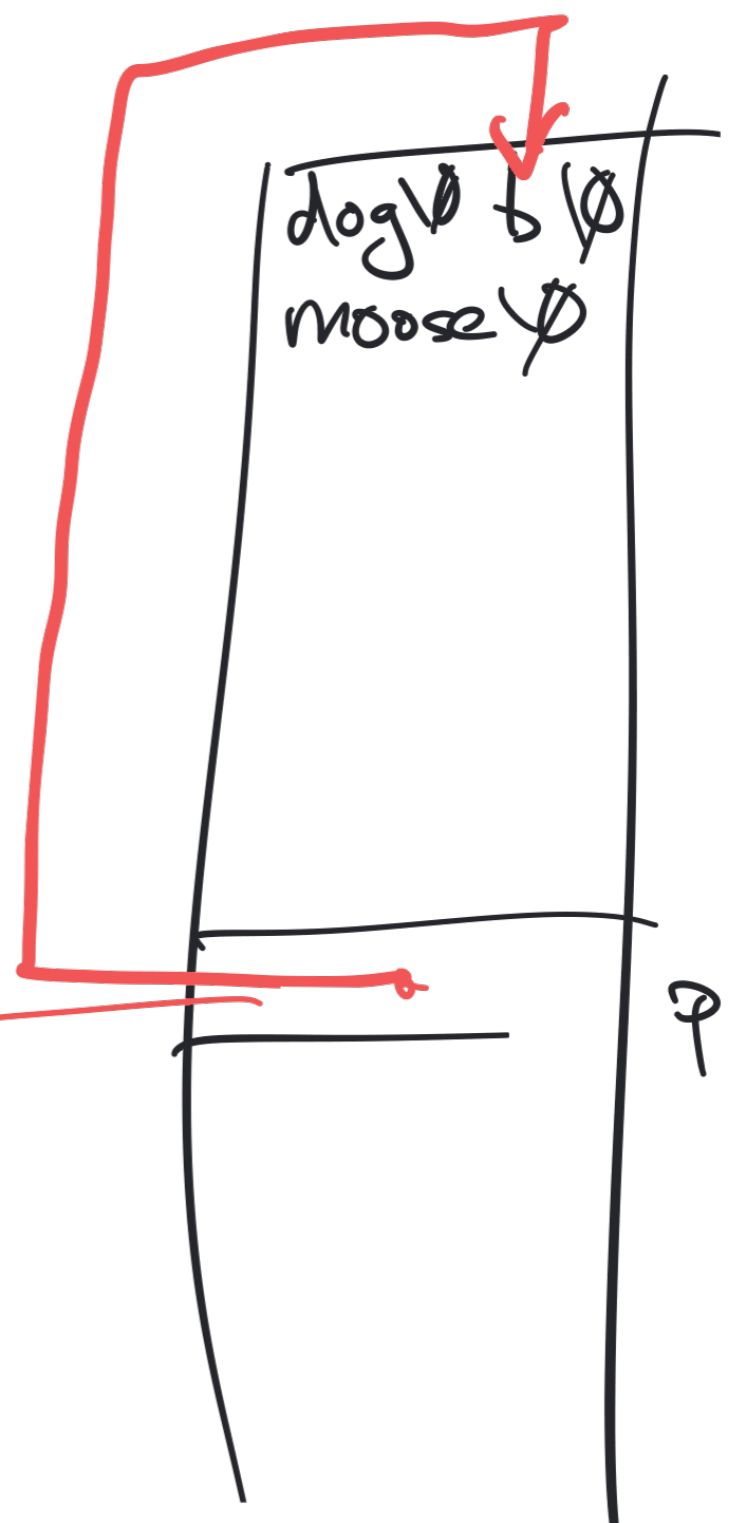
Compile-time error

char *p = "dog";

sizeof(p) ← 8

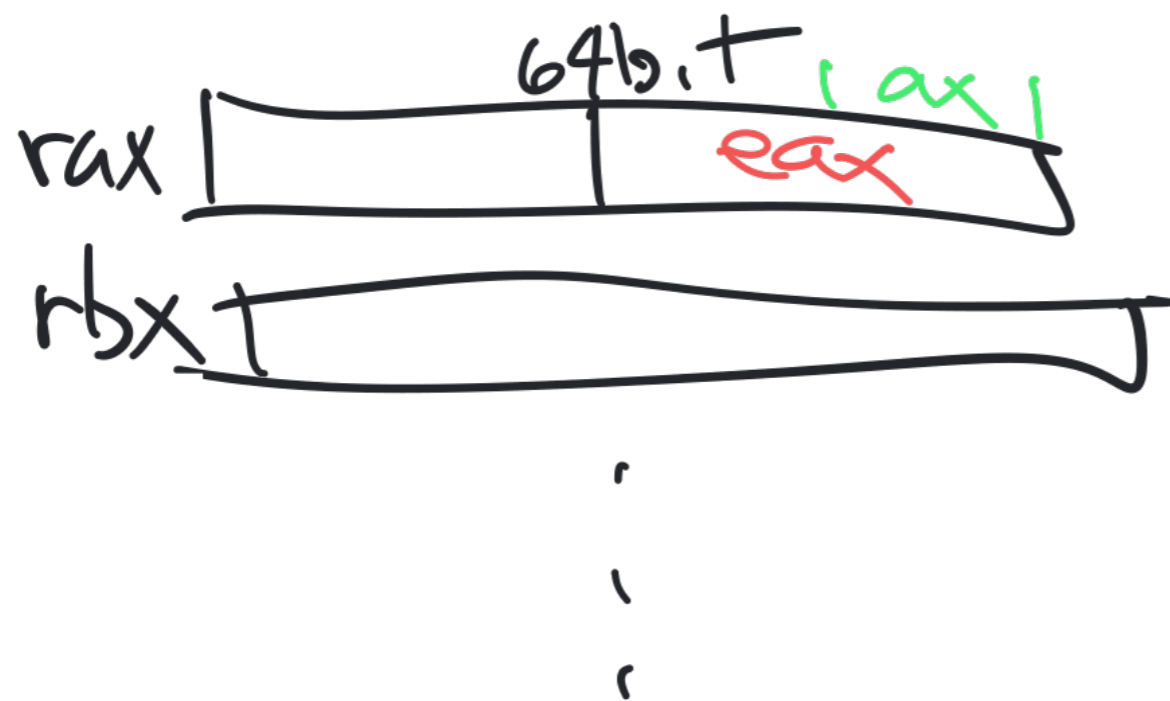
strlen(p) ← 3

p = "j";

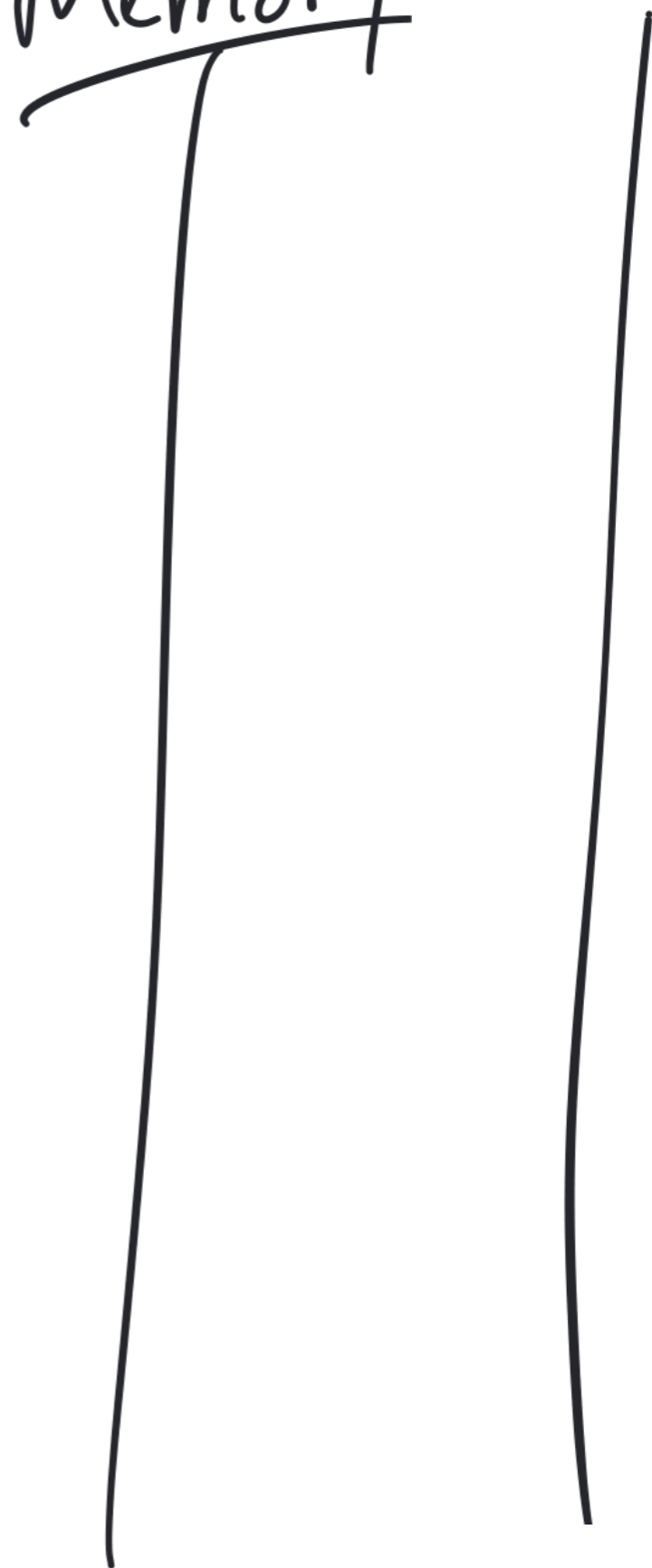


"%p" → 0x30

Registers



Memory



EFLAGS register

Do an operation

Store metadata about
the op in EFLAGS

eg. `add %rax, %rbx, %rcx`

What's the sign of the
result?

→ The S bit of EFLAGS
register