Mon Feb 8th 2021

HW1 - due Tues 2/9 (tomorrow) by 11pm

HW2 - soon

today
- scanf/fscanf and EOF
- Day 7 recap questions
- exercises 2-2 & 2-3 review
- exercise 3-1

slido.com
jhuisp01
zero

scanf, printf

%f vs. %lf

printf	scanf	printf	scanf
float	float	float	double
double		double	

scanf / fscanf

return value

normally: number of successful conversions

```
scanf("%f %c",
      &temp,
      &unit)
```

2 if successful

0 or 1 if unsuccessful

EOF (-1) if end of input before 1st conv

Day 7 recap

```
int arr[5];
```

`sizeof(arr)` ⇒ 20 (5 · 4)

```
int x[10];
...
sum(x);
```

`sizeof(int)` ⇒ 4

find # elts in array

`sizeof(arr) / sizeof(int)`

20 / 4 ⇒ 5

`size_t`

```
int sum(int arr[], size_t len) {
  size_t n = sizeof(arr) / sizeof(int);
  for (size_t i=0; i<n; i++) {
    ...
```

8 / 4 ⇒ 2

`len`

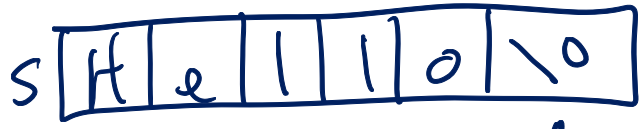
pointer! (not array)

```
char s[] = "Hello";
```

strlen(s) ⟹ 5

sizeof(s) ⟹ 6

```
int add(int a, int b) {
    :
}
int main() {
    x = add(2, 3);
```



NUL terminator

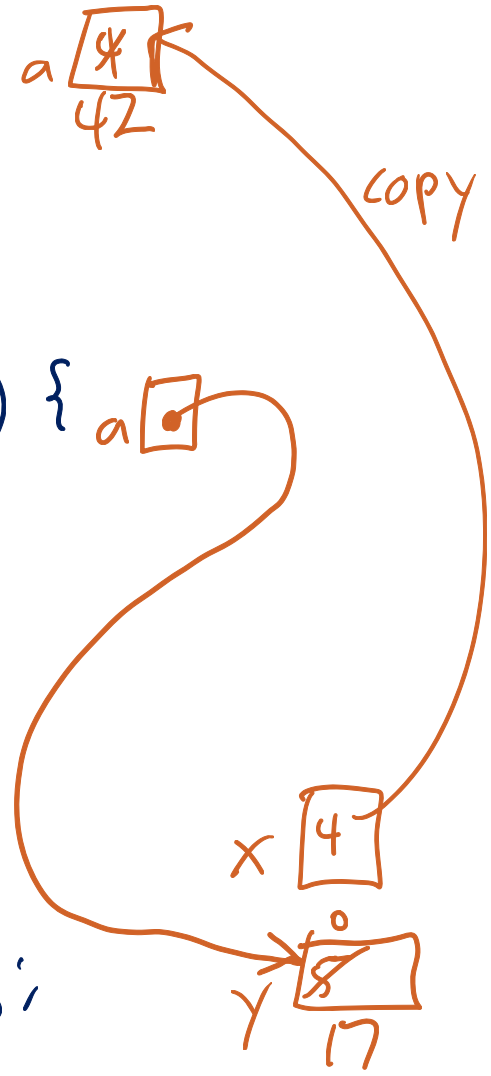
C: declare/defined before use

function decl. ⟹ `int add(int a, int b);`

```
int foo(int a) {
    a = 42;
}

int bar(int a[]) {
    a[0] = 17;
}

int main() {
    int x = 4;
    int y[] = {5};
    foo(x);
    bar(y);
    printf("%d %d\n", x, y[0]);
}
```



"stack overflow"

4 17