

This was CS50

what ultimately matters in this course is not so much where you end up relative to your classmates but where you, in **Week 10**, end up relative to yourself in **Week 0**

#  
##  
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#####



# C\$50 Finance

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Symbol	Name	Shares	Price	TOTAL
NFLX	Netflix Inc.	1	\$301.78	\$301.78
CASH				\$9,698.22
				<b>\$10,000.00</b>

"Beside learning the new material, I felt that I started to be more 'comfortable with being uncomfortable' and being okay with working towards building a skill rather than just getting the right answer..."



## Headlines

### Past headlines

For headlines posted prior to the past seven days, click [here](#).

Thank You

CS50

Emily Doug John Bill Dylan Clarence  
Jason Benjamin Ethan Myungin Austin Katherine Gabriel Andy  
Jonathan Alexander Davey Emma Johnny Ben Andrew  
Jess Hanna Kit Jake Christina Ernie Carter Erin  
Josh Ben Isaac Elisa Eric Abdur Marian Caroline  
Dan Kaiwen Emilia Cassandra Amrit Andrew  
Greg August Gustavo Amy Alex Marika Ian Montague  
Kofi Amy Edith Barbara David Colton Mike  
Anton Ibtihal Athena Brian Kareem James Krishna  
Andra Cheng Aileen Alex Julia  
Spencer Tyler Sophia Illeana Phil Vincent  
Wes Sabrina Robert Anand Xiu Elle  
Kevin Sewon Varsha Sanchie Barkley Nir Will  
Benedict Rodriguez Jana Emily Jude  
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Katherine Max Marcello Leah Sanjana Nick Natalie Sang-o Greta  
Reese Jason Joyce Zamyla Thomas Phillip Nick Sean  
Sarin Shlomo Jo-Jo Nazeli Toby Nadia Idris  
Anushree Johan Carter Zhihang Vojta  
Kazemi Sela Richard Tara Veronica Joe

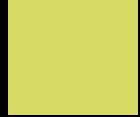
# Week 0

input → algorithms → output

1 2 3

A

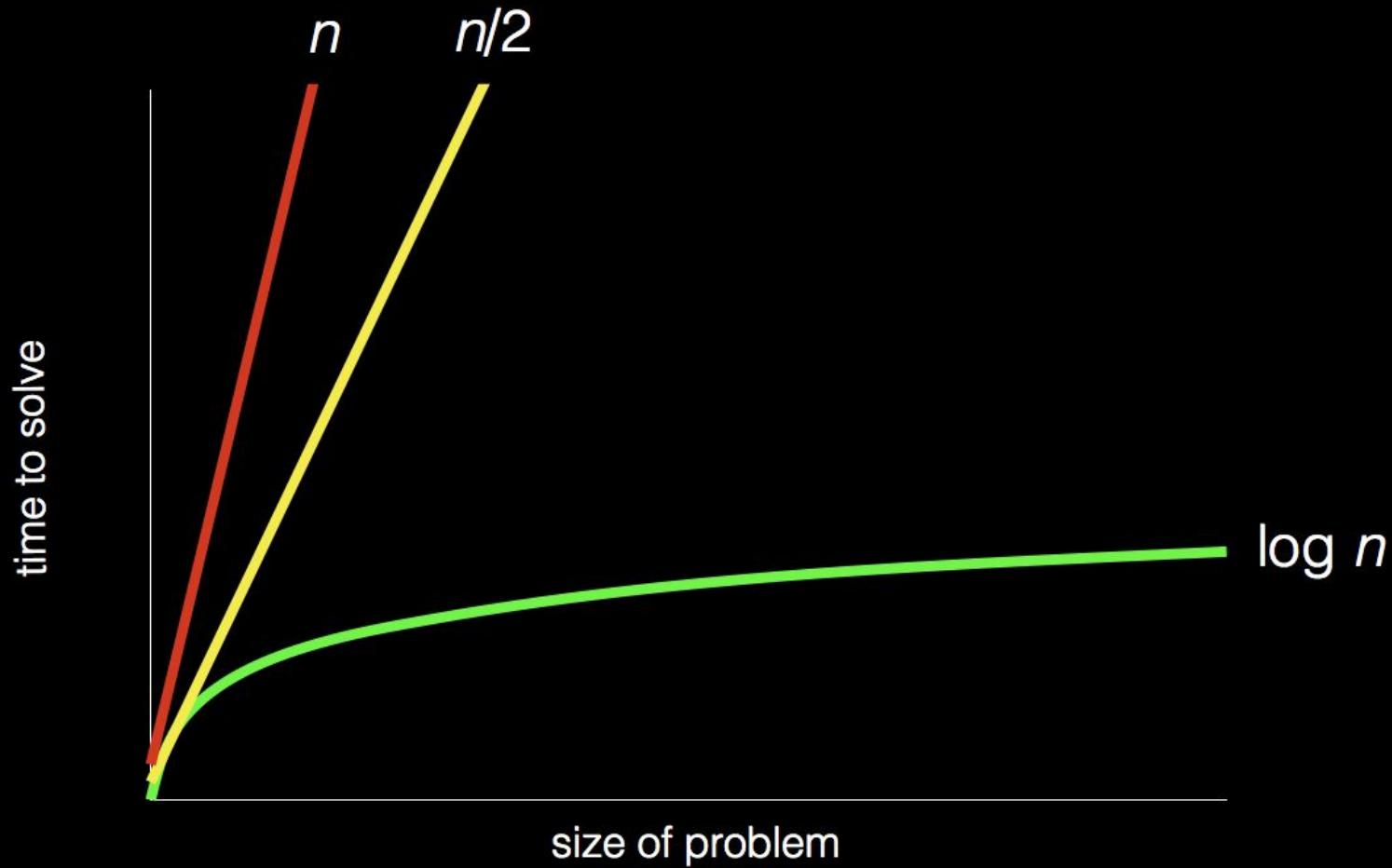
65

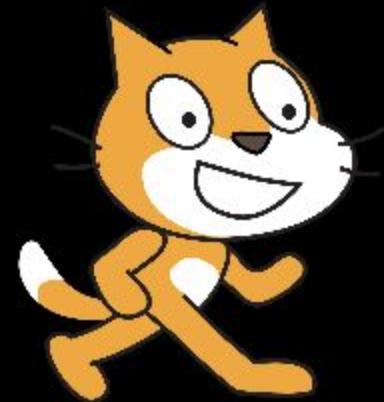






```
0 pick up phone book
1 open to middle of phone book
2 look at names
3 if Smith is among names
4     call Mike
5 else if Smith is earlier in book
6     open to middle of left half of book
7     go back to step 2
8 else if Smith is later in book
9     open to middle of right half of book
10    go back to step 2
11 else
12     quit
```





# Week 1

```
#include <stdio.h>

int main(void)
{
    printf("hello, world\n");
}
```

01111111 01000101 01001100 01000110 00000010 00000001 00000001 00000000  
00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000  
00000010 00000000 00111110 00000000 00000001 00000000 00000000 00000000  
10110000 00000101 01000000 00000000 00000000 00000000 00000000 00000000  
01000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000  
11010000 00010011 00000000 00000000 00000000 00000000 00000000 00000000  
00000000 00000000 00000000 00000000 01000000 00000000 00111000 00000000  
00001001 00000000 01000000 00000000 00100100 00000000 00100001 00000000  
00000110 00000000 00000000 00000000 00000101 00000000 00000000 00000000  
01000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000  
01000000 00000000 01000000 00000000 00000000 00000000 00000000 00000000  
01000000 00000000 01000000 00000000 00000000 00000000 00000000 00000000  
11111000 00000001 00000000 00000000 00000000 00000000 00000000 00000000  
11111000 00000001 00000000 00000000 00000000 00000000 00000000 00000000  
00001000 00000000 00000000 00000000 00000000 00000000 00000000 00000000  
00000011 00000000 00000000 00000000 00000100 00000000 00000000 00000000  
00111000 00000010 00000000 00000000 00000000 00000000 00000000 00000000  
...

# Week 2

```
#include <cs50.h>
#include <stdio.h>

int main(void)
{
    string name = get_string("Name: ");
    printf("hello, %s\n", name);
}
```

01111111010001010100110001000110	01111111010001010100110001000110	00101111011011000110100101100010
00000010000000010000000100000000	00000010000000010000000100000000	01100011001011100111001101101111
00000000000000000000000000000000	00000000000000000000000000000000	0010111000110110001000000101111
00000000000000000000000000000000	00000000000000000000000000000000	01110101011100110111001000101111
00000001000000000011110000000000	00000011000000000011110000000000	01101100011010010110001000101111
00000001000000000000000000000000	00000010000000000000000000000000	01110000011100000110110010111111
00000000000000000000000000000000	11000000000111100000000000000000	0011011000110100010110101101100
00000000000000000000000000000000	00000000000000000000000000000000	0110100101101110011101010111100
00000000000000000000000000000000	01000000000000000000000000000000	00101101011001110110111001110101
00000000000000000000000000000000	00000000000000000000000000000000	0010111011011000110100101100010
10100000000001000000000000000000	00101000011001000000000000000000	01100011010111110110111001101111
00000000000000000000000000000000	00000000000000000000000000000000	011011001110011011010001100001
00000000000000000000000000000000	00000000000000000000000000000000	01110010011001010110010000101110
01000000000000000000000000000000	01000000000000000000000000000000	0110000100100000010000001000001
00000000000000000000000000000000	00000111000000000100000000000000	01010011010111110100111001000101
00001010000000000000000000000000	00011100000000000110010000000000	01000101010001000100010101000100
0101010101001000100100111100101	00000001000000000000000000000000	0010000000101000001000000101111
01001000100001111011000010000	00000101000000000000000000000000	01101100011010010110001000101111
0011000111000001000100111000111	00000000000000000000000000000000	0111000001110000011011001011111
01001000101111100000000000000000	00000000000000000000000000000000	0011011000110100010110101101100
00000000000000000000000000000000	00000000000000000000000000000000	0110100101101110011101010111100
00000000000000000000000000000000	00000000000000000000000000000000	00101101011001110110111001110101
11101000000000000000000000000000	00000000000000000000000000000000	00101111011011000110010000101101
0000000010010001011111000000000	00000000000000000000000000000000	01101100011010010110111001110101
00000000000000000000000000000000	01011100001001010000000000000000	0111000001011010111100000111000
00000000000000000000000000000000	00000000000000000000000000000000	0011011000101101001101000110100
...	...	...

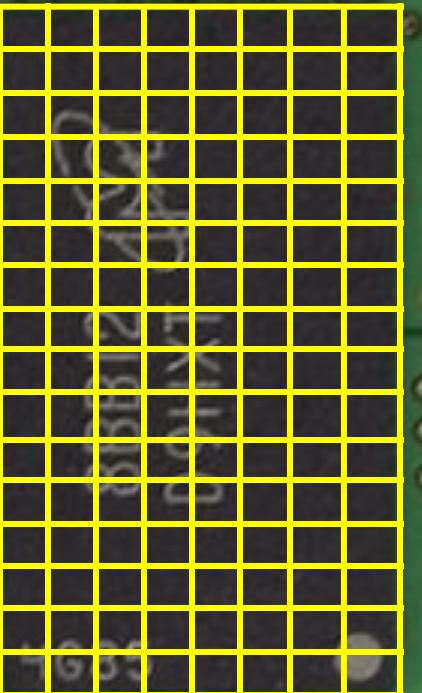






8BB12  
D9HXT

4G85



# Week 3

string

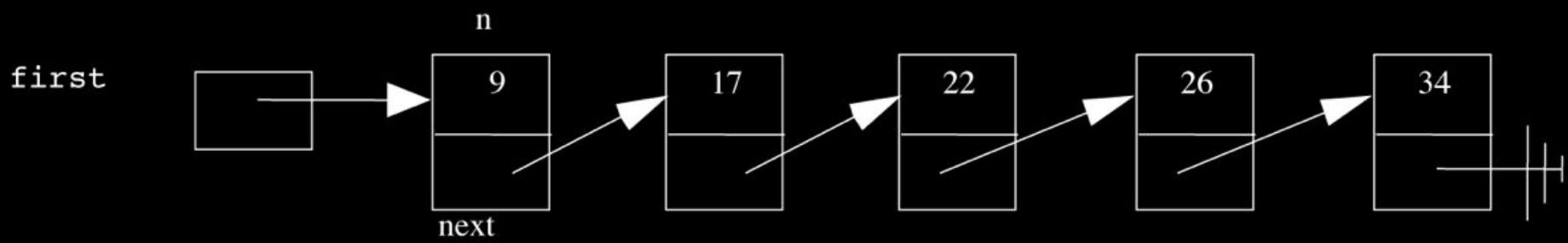
char \*

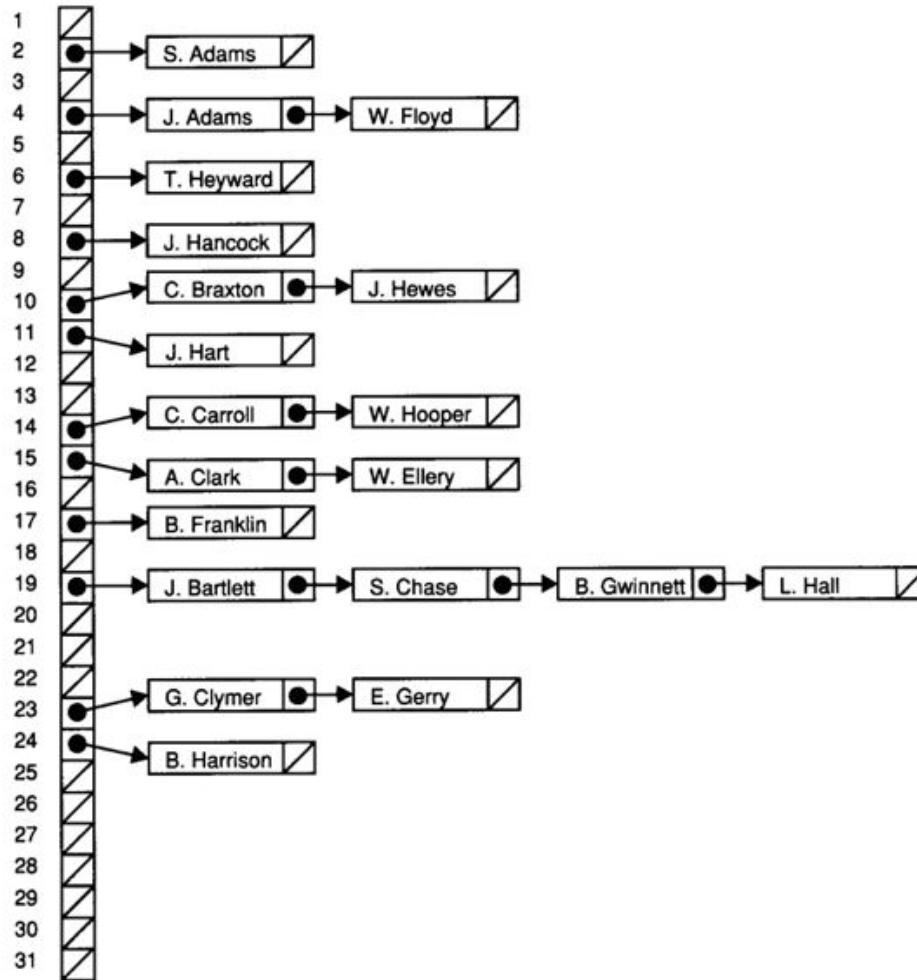
```
void swap(int *a, int *b)
{
    int tmp = *a;
    *a = *b;
    *b = tmp;
}
```



# Week 4

```
typedef struct node
{
    int n;
    struct node *next;
}
node;
```





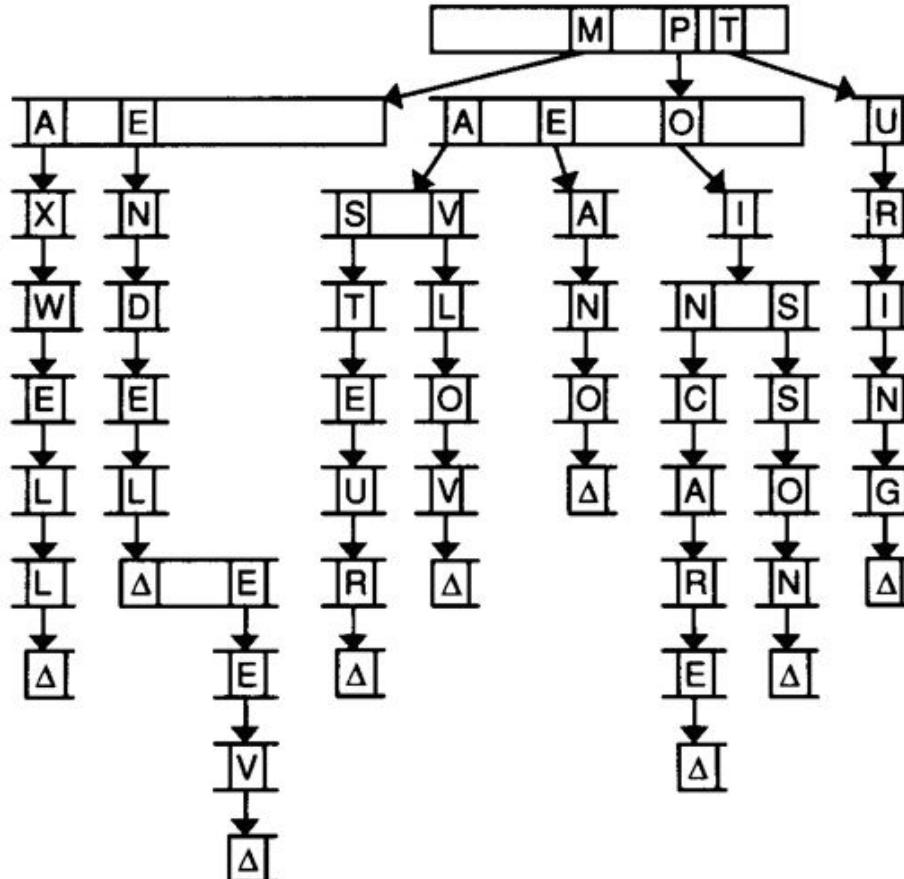
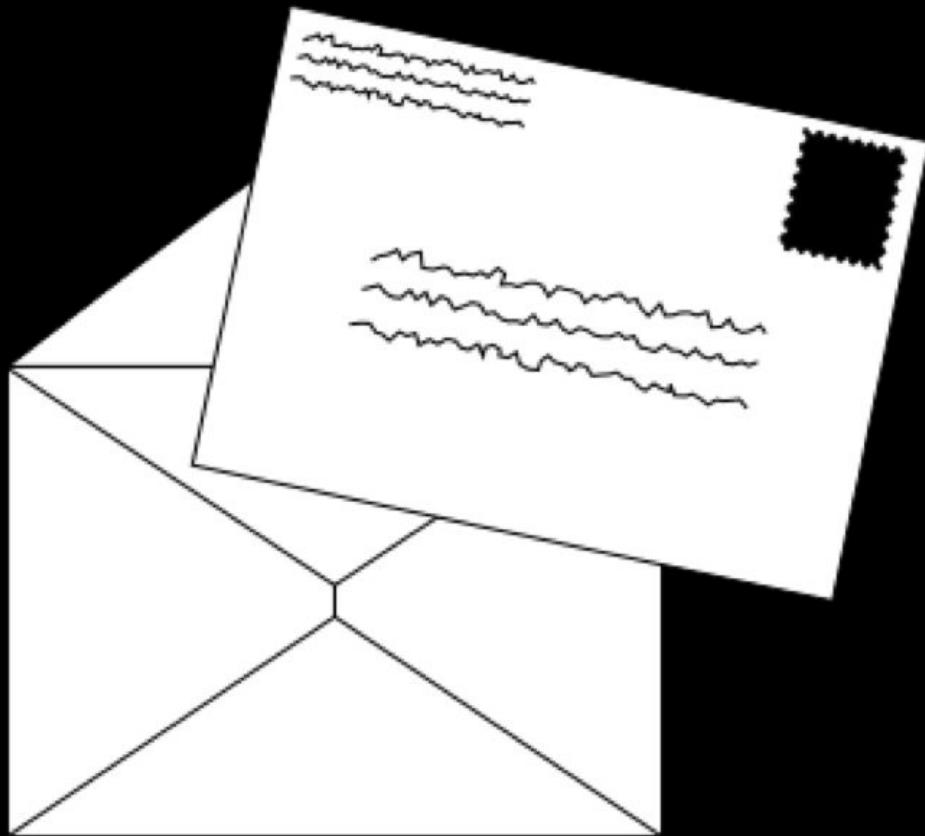


Figure from Lewis and Denenberg's Data Structures & Their Algorithms.

# Week 5



GET / HTTP/1.1

Host: safetyschool.org

...

GET / HTTP/1.1

Host: www.harvardsucks.org

...

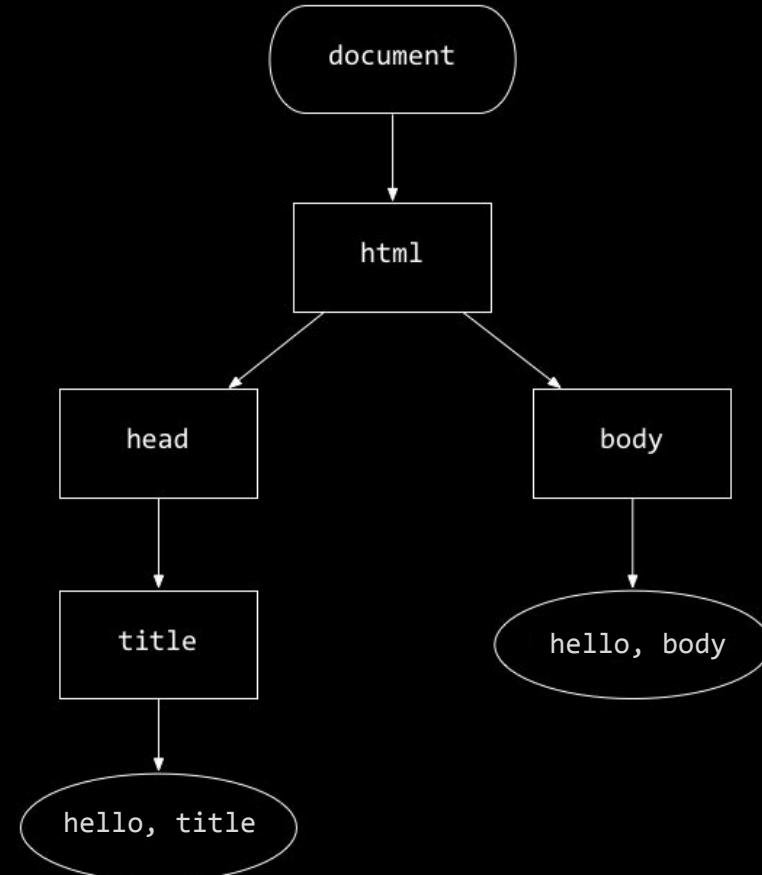


```
<!DOCTYPE html>

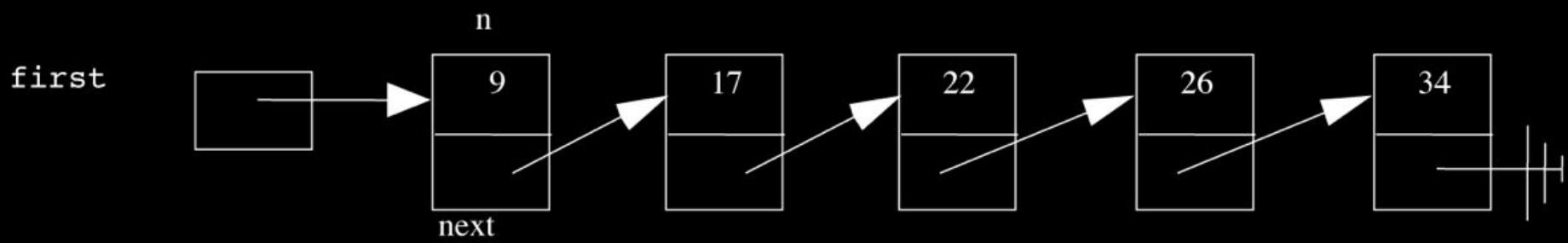
<html lang="en">
  <head>
    <title>
      hello, title
    </title>
  </head>
  <body>
    hello, body
  </body>
</html>
```

```
<!DOCTYPE html>

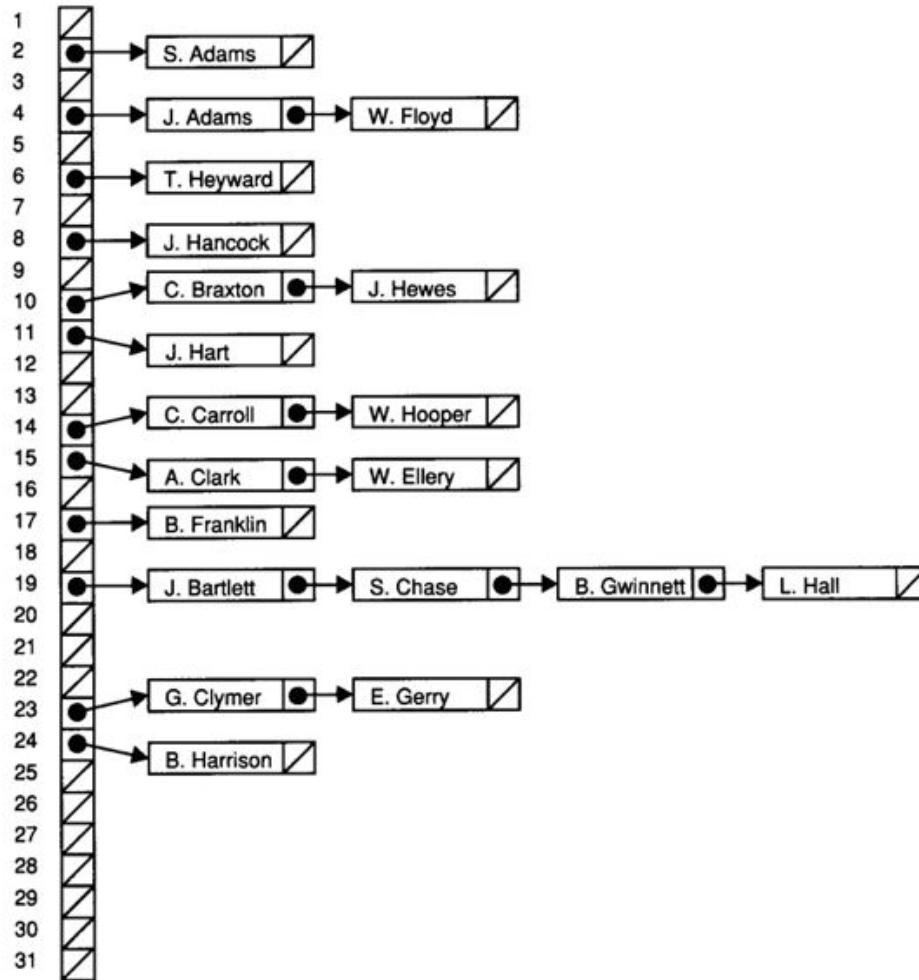
<html lang="en">
  <head>
    <title>
      hello, title
    </title>
  </head>
  <body>
    hello, body
  </body>
</html>
```



# Week 6

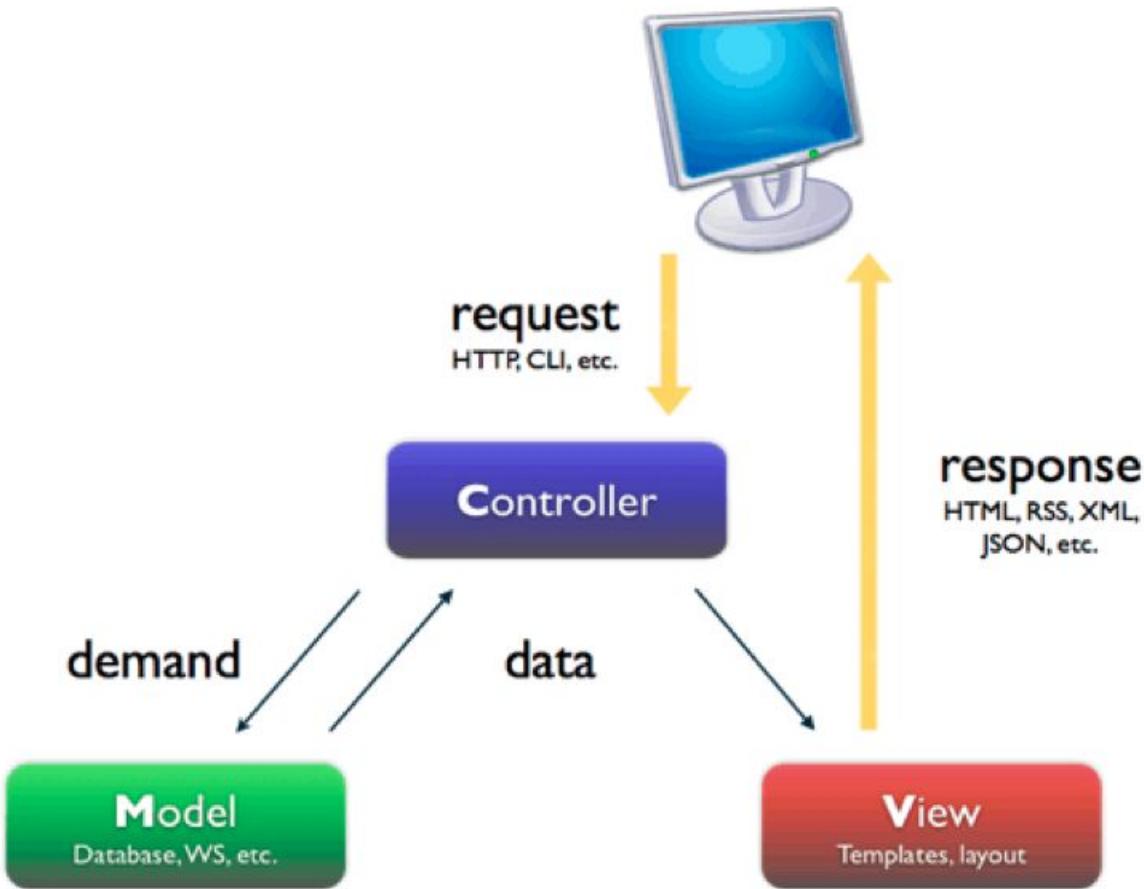


`list()`



```
dict()
```

# Week 7



# Week 8

**CREATE** ...

**DELETE** ...

**INSERT** ...

**SELECT** ...

**UPDATE** ...

...

# CS50 Hackathon











# CS50 Fair







CS50  
STRESS BALL



I taught CS50.

POVE VIBES

I took CS50.



I took *CS50*

I took *CS50*

I took **CS50**

*CS50*



# Life after 50

The screenshot shows the CS50 IDE interface. At the top, there's a toolbar with standard Mac OS X window controls (red, yellow, green), a camera icon, and the title "CS50 IDE". Below the toolbar is a navigation bar with back, forward, search, and other icons. The main menu bar includes "CS50 IDE", "File", "Edit", "Find", "View", and "Go". On the right side of the menu bar is a user profile picture of a cat and a "Share" button.

The left sidebar shows a file tree under "~/workspace/" containing a single file named "hello.c". The main editor area displays the following C code:

```
#include <stdio.h>
int main(void)
{
    printf("hello, world\n");
}
```

Below the editor is a terminal window titled "workspace/" with the command prompt "~/workspace/ \$".

On the far right, there are three vertical tabs: "Collaborate", "Outline", and "Debugger".

# Install command-line tools

- <https://developer.apple.com/xcode/>
- <https://docs.microsoft.com/en-us/windows/wsl/about>

# Learn Git

[https://youtu.be/MJUJ4wbFm\\_A](https://youtu.be/MJUJ4wbFm_A)

# Install Git

<https://help.github.com/articles/set-up-git/>

# Sign up for free private repos

[https://education.github.com/discount\\_requests/new](https://education.github.com/discount_requests/new)

# Try Atom

<https://atom.io/>

# Try VS Code

<https://code.visualstudio.com/>

# Try Vim

<http://valloric.github.io/YouCompleteMe/>

# Host a web site

- <https://pages.github.com/>
- <https://www.netlify.com/>
- ...

# Host a web app

- <https://www.heroku.com/platform>
- <https://www.wix.com/code/home>
- ...

# Host a web app

- <https://aws.amazon.com/education/awseducate/>
- <https://azure.microsoft.com/en-us/free/students/>
- <https://cloud.google.com/edu/>
- ...

# Read lots

- <https://www.reddit.com/r/programming>
- <https://news.ycombinator.com/>
- <https://techcrunch.com/>
- <https://stackoverflow.com/>
- <https://serverfault.com/>
- <https://www.google.com/>
- ...

# Stay in touch

- <https://www.reddit.com/r/cs50>
- <https://discord.gg/QYZQfZ6>
- <https://www.facebook.com/groups/cs50>
- <https://gitter.im/cs50/x>
- <https://www.instagram.com/cs50/>
- <http://www.linkedin.com/groups/CS50-7437240>
- <https://www.quora.com/topic/Harvard-CS50>
- <https://cs50x.slack.com/>
- <https://www.snapchat.com/add/cs50>
- <http://cs50.stackexchange.com/>
- <https://twitter.com/cs50>
- ...



# JEOPARDY!



# JEOPARDY!



1863. GETTYSBURG.

ELCH CROWNHINSHIELD  
MAY, 1866.

NEVILLE HEDGES.  
RUARY, 1863.

1863.

SUMMER FAIRE.  
3 JULY, 1863. GETTYSBURG.

CAROT—JACKSON RUSSEL.  
1863. FORT WAGNER.



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