



# Computer Science 50

Introduction to Computer Science I

Harvard College

Week 10

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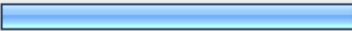


# Your Classmates by Year

2. What year are you?			
		Response Percent	Response Count
freshman		21.7%	62
<b>sophomore</b>		<b>30.8%</b>	88
junior		25.9%	74
senior		17.5%	50
grad student		4.2%	12
		<i>answered question</i>	<b>286</b>

# Your Classmates by Gender

:: Female	29%	79
:: Male	71%	194

# Your Classmates' Comfort Levels






1. Which category do you feel you fall into?			Response Percent	Response Count
I'm among "those less comfortable"			30.8%	88
I'm among "those more comfortable"			19.6%	56
<b>I'm somewhere in between</b>			<b>49.7%</b>	142
			<i>answered question</i>	286

# Your Classmates' Prior Experience

4. How much programming experience did you have before CS 50?			
		Response Percent	Response Count
none		43.4%	124
<b>a little</b>		<b>46.5%</b>	133
a lot		10.1%	29
<i>answered question</i>			<b>286</b>

# Time Spent on Problem Sets

23. Roughly how much time would you say you've spent on recent problem sets (say, ps2: Crypto onward)?

		Response Percent	Response Count
0 - 5 hours		4.0%	11
5 - 10 hours		38.5%	106
10 - 15 hours		33.1%	91
15 - 20 hours		17.5%	48
20+ hours		6.9%	19
<i>answered question</i>			<b>275</b>

# Oh, the Places You'll Go!

- :: **CS 51: Introduction to Computer Science II**  
**sneak preview on Friday, 7 December 2007**

- :: Abstraction and design in computation. Topics include: Functional and object-oriented styles of programming; software engineering in the small; implementation of a language interpreter. Goal: understanding how to design large programs to make them readable, maintainable, efficient, and elegant. Exercises in LISP (Scheme) and C++.

- :: **CS 61: Systems Programming and Machine Organization**  
**sneak preview on Monday, 10 December 2007**

- :: Fundamentals of computer systems programming, machine organization, and performance tuning. This course provides a solid background in systems programming and a deep understanding of low-level machine organization and design. Topics include C and assembly language programming, program optimization, memory hierarchy and caching, virtual memory and dynamic memory management, concurrency, threads, and synchronization.



Image from <http://members.memlane.com/gromboug/P16MvSig.htm>.

The year was 1995...



# Recommended Reading

:: **TCP/IP Tutorial**

<http://www.w3schools.com/tcpip/>

:: **How Web Servers Work**

<http://computer.howstuffworks.com/web-server.htm>

:: **XHTML Tutorial**

<http://www.w3schools.com/xhtml/>

:: **CSS Tutorial**

<http://www.w3schools.com/css/>

:: **PHP Tutorial**

<http://www.w3schools.com/php/>

:: **SQL Tutorial**

<http://www.w3schools.com/sql/>

# “RTFM”







- :: **PHP Manual**

<http://us.php.net/manual/en/>

- :: **MySQL 5.0 Reference Manual**

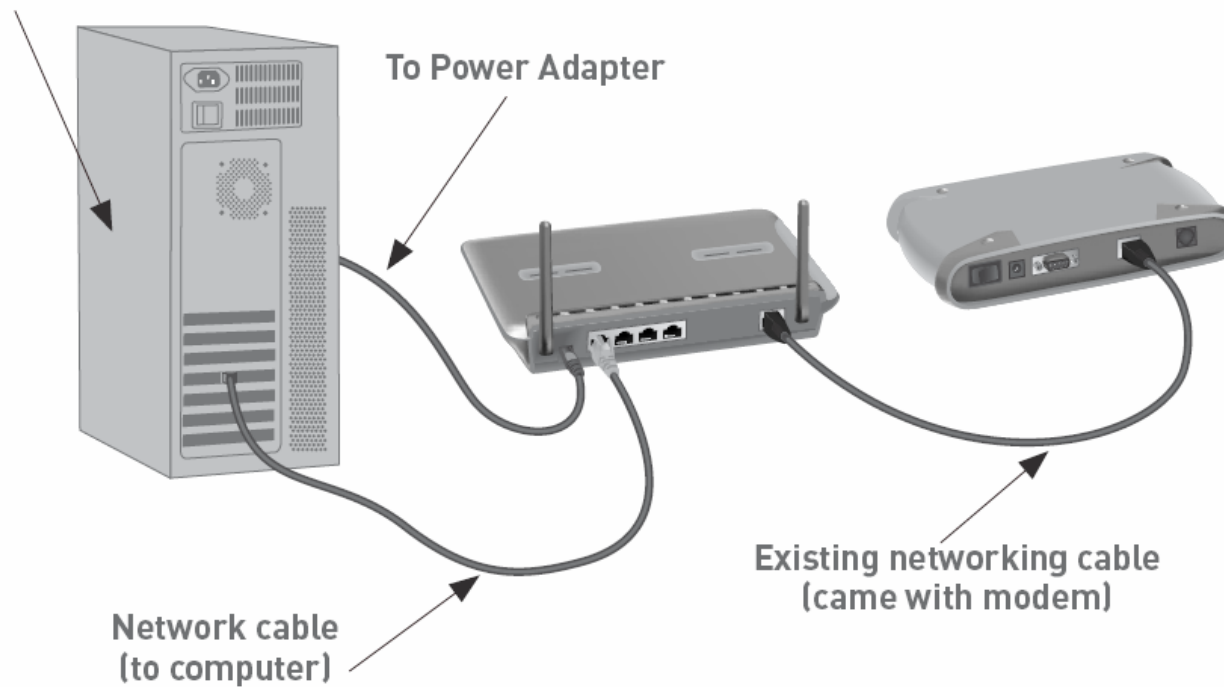
<http://dev.mysql.com/doc/refman/5.0/en/>

# Use the Bulletin Board!

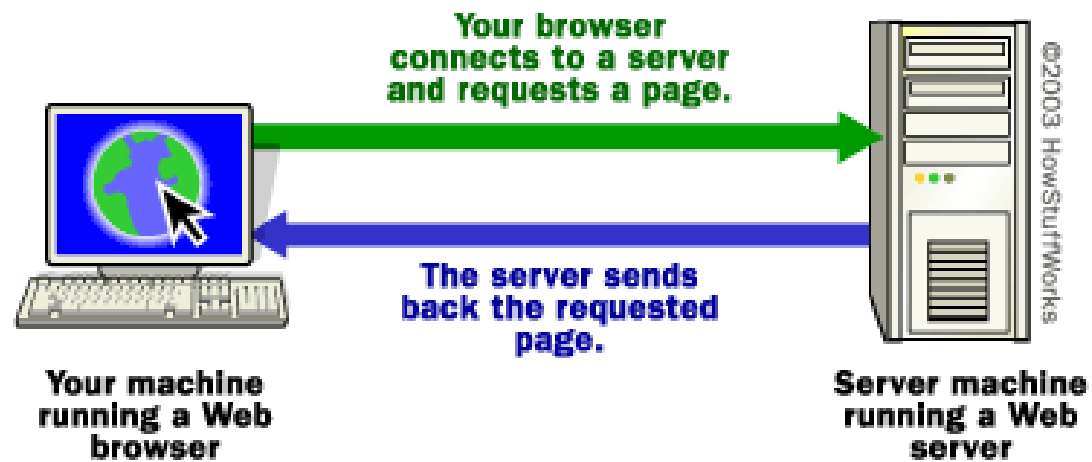
Fall 2007		
Forum	Topics	Posts
<input type="checkbox"/> <b><u>Announcements</u></b> Official announcements by the staff. You'll find that you can reply to our announcements but not initiate them yourself. 	19	80
<input type="checkbox"/> <b><u>Final Project Ideas</u></b> Have an idea for your final project that you'd like to bounce off of others? Have an idea for a final project that you'd like to see someone else implement? Post it here! Try to give your post a descriptive title (e.g., "An AIM Bot that Tells You What's For Lunch"). 	44	90
<input type="checkbox"/> <b><u>Other</u></b> For posts that don't seem to belong in the other forums! 	78	268
<input type="checkbox"/> <b><u>Problem Sets</u></b> For Q&A about problem sets. <b>Do NOT post your work in this public forum</b> ; speak privately with the staff instead. 	225	872
<input type="checkbox"/> <b><u>Problem Sets (Hacker Editions)</u></b> For Q&A about Hacker Editions of problem sets. <b>Do NOT post your work in this public forum</b> ; speak privately with the staff instead. 	58	223
<input type="checkbox"/> <b><u>Technical Support</u></b> For questions about your FAS account, lab computers, your own computer, this bulletin board, the VTR, etc. 	36	113

# TCP/IP

Mac or PC computer that was originally connected to the cable or DSL modem



# HTTP



# XHTML

```
<!DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <title>hello, world</title>
  </head>
  <body>
    hello, world
  </body>
</html>
```

# CSS

```
<!DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <link href="styles.css" rel="stylesheet" type="text/css" />
    <title>hello, world</title>
  </head>
  <body>
    hello, world
  </body>
</html>
```

# Validation

<http://validator.w3.org/>



# Forms

## :: Text Fields

```
<input name="email" type="text" />
```

## :: Password Fields

```
<input name="password" type="password" />
```

## :: Checkboxes

```
<input name="save" type="checkbox" />
```

## :: Radio Buttons

```
<input name="gender" type="radio" value="F" />
```

```
<input name="gender" type="radio" value="M" />
```

## :: Drop-Down Menus

```
<select name="dorm">
```

```
  <option value=""></option>
```

```
  <option value="Matthews"></option>
```

```
  <option value="Weld"></option>
```

```
</select>
```

# Mispellings

```
$dictionary[$word] = TRUE;
```

# Some Predefined Variables

:: `$_GET`

:: `$_POST`

# SQL

:: **SELECT**

:: **INSERT**

:: **UPDATE**

:: **DELETE**



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