

EECS 183, Week 1

Hello world! Each week, I will try to bring a handout similar to this one in an effort to make it easier for you to follow along. If you'd like, you can take more detailed notes separately, but I will usually post notes (along with slides and code) on my website (umich.edu/~maximal) as well.

Definitions

(~9:16)

In simplest terms, **programming** is _____.

Computer science is a _____.

An **algorithm** is a _____.

Algorithms

(~9:20)

Write some steps to instruct someone to make a peanut butter and jelly sandwich.

Socrative

(~9:30)

We'll be using m.socrative.com (room EECS183) in discussion section to answer exam-style questions in real time. Today, I'd just like to ask you a few intro questions.

EECS 183, Week 1

C++

(~9:38)

```
#include <iostream>
using namespace std;
```

```
int main() {
    cout << "Hello, world!" << endl;
    return 0;
}
```

Variables

(~9:42)

Complete the memory diagrams for the following code after each line.

```
int b;
b = 2;
int a = 1;
a = b;
b = 5;
```

List some of the variable types in C++:

--

Escape sequences

(~9:45)

Sequence	Description	Sequence	Description
\n	New line / line break	\'	
\t		\"	
		\\	

Operators

(at home)

What do the following expressions evaluate to? (Write a simple program in Xcode/VS/Runway to check.)

Expression	Value	Expression	Value	Expression	Value
7 % 0		7 % 4		7 % 8	
7 % 1		7 % 5		7 % 10	
7 % 2		7 % 6		7 / 2	
7 % 3		7 % 7		7 + 5 % 3 / 2	