

Welcome to AP Computer Science! For your summer assignment, you will be learning the entirety of *Unit 1 - Primitive Data Types* and part of *Unit 3 - Boolean Expressions*. I have included both slideshows where you should take down your notes and videos that add real-time coding examples. One of the more difficult parts of this class is learning the new type of language you will be using in this class, so writing any and all new words/language down will help you begin to internalize what everything means.

The slideshows are around 20 slides each, and all but one include “coding labs” at the end. Each video is about 5 minutes long, and you can practice coding alongside the video.

Coding labs are you actually designing and implementing small programs, or “algorithms,” that accomplish a specific task. These are bolded after each subsection for a total of 7 programs you will create. All your code should be within your main method for each class.

For each coding lab, I would like you to set up your class in this specific format:

```
/*
 * Your Name
 * The Date
 * Names of people who helped and/or
 * collaborated with you on the code
 */
public class ExampleSetup
{ //these brackets must be lined up with its matching pair
    //main method that prints directly to the console
    public static void main(String[] args)
    {
        System.out.println("hello");
        System.out.println();
    }
}
```

Video 1: Downloading Eclipse: [Java Programming Tutorial - 3 - Downloading Eclipse](#)

## Unit 1: Primitive Data Types

**A:** Basic Java Syntax: Slideshow [HERE](#)

Video 2: Hello World [Java Programming Tutorial - 4 - Hello YouTube](#)

**Complete: Unit1Lab1**

**B:** Variables and Datatypes: Slideshow [HERE](#)

Video 3: Variables [Java Programming Tutorial - 5 - Variables](#)

**Complete: Unit1Lab2**

**C:** Arithmetic Operations: Slideshow [HERE](#)

Video 4&5: Scanner Class: We will only use this for the summer assignment because it is no longer part of the AP curriculum but is pretty useful.

[Java Programming Tutorial - 6 - Getting User Input](#)

[Java Programming Tutorial - 7 - Building a Basic Calculator](#)

Video 6&7: Mathematical Operators

[Java Programming Tutorial - 8 - Math Operators](#)

[Java Programming Tutorial - 9 - Increment Operators](#)

**Complete: Unit1Lab3**

**Unit1Lab4**

**Unit1Lab5**

## Unit 3: Boolean Expressions

**A:** if Statements: Slideshow [HERE](#)

Video 8: [Java Programming Tutorial - 10 - If Statement](#)

Video 9: [Java Programming Tutorial - 19 - else if Statement](#)

**B:** Compound Boolean Expressions: Slideshow [HERE](#)

Video 10: [Java Programming Tutorial - 18 - Nested if Statements](#)

Video 11: [Java Programming Tutorial - 11 - Logical Operators](#)

**Complete: Unit3Lab1**

**Unit3Lab2**