



Lesson 2.2: Variables and Types

https://codehs.com/course/692/lesson/2.2

Description	
Objective	
Activities	2.2.1 Video: Variables and Types 2.2.2 Quiz: Variables and Types 2.2.3 Example: Variables 2.2.4 Exercise: Our First Integer 2.2.5 Exercise: Answering Questions
Prior Knowledge	
Planning Notes	
Standards Addressed	<p>CR1: Teaches students to design and implement computer-based solutions to problems.</p> <p>CR5: Teaches students to use elements of the standard Java library from the AP Java subset in Appendix A of the AP Computer Science A Course Description.</p> <p>CR6: Includes a structured-lab component composed of a minimum of 20 hours of hands-on lab experiences.</p>
Teaching and Learning Strategies	
Discussion Questions	<ul style="list-style-type: none"> • Before the students work on the lesson, have them discuss how they think variables can help make writing code easier or simpler to understand. • What is a variable? • What are some real world examples of variables? What is a name that you give to a value (for example when you say “My phone number” that actually is representing a number) • How is writing code similar to speaking a language?
Resources/Handouts	

Vocabulary

Term	Definition
lowerCamelCase	lowerCamelCase is a naming convention where the first letter is lower case, and each subsequent start of a word is upper case.
Variable	A symbol or container that holds a value.
int	int is a Java type that represents an integer (a whole number)
String	String is a Java type that represents a string of characters (text)
char	char is a Java type that represents a single character (a single letter)
boolean	boolean is a Java type that can either be true or false

double	double is a Java type that represents a real number with decimal values
Declare a variable	Declaring a variable is defining it for the first time.
Initialize a variable	Initializing a variable is giving it an initial value, or a starting value.
Assigning to a variable	Assigning to a variable is updating the variable's value
Type	The type of a variable defines what kinds of values the variable can hold

Modification: Advanced	Modification: Special Education	Modification: English Language Learners
	Pair programming with another student Print out video slides for students to reference	Print out video slides and have students use dictionary to translate unknown vocabulary Pair programming with another student