

Name \_\_\_\_\_ Period \_\_\_\_\_

**Skill 15.01 Exercise 1**

What is the purpose of variables in computer programs?

What type of data is stored in each of the variables below?

`var a = 10;`

`var b = "hello!";`

`var c = true;`

`var d = [1, 2, 3, 4, 5]`

`var e = 3.14;`

**Skill 15.02 Exercise 1**

You want to create a number guessing game. When the game loads, a secret number will be generated. Then the user will be provided 3 guesses to identify the number. What variables would you need to store the necessary data for the game?

For each variable, write statements to show how you would declare and/or initialize the variable

**Skill 15.03 Exercise 1**

Indicate whether each of the following variable declarations are legal or illegal. If it is illegal, indicate why.

code	legal/illegal
var 1231abc;	
var big-number;	
var name2;	
var myVar*2;	
2 = var myNum;	
var var;	

**Skill 15.04 Exercise 1**

For each of the following indicate what is printed as the output. If an error occurs, indicate the error.

Code	Output
<pre>var x = 10 var y = x x = y console.log(y)</pre>	
<pre>var x = y = z = 5 console.log(x) console.log(y) console.log(z)</pre>	
<pre>var a = 5 console.log(a) var b = 10 console.log(b) var c = a console.log(c) a = b b = c console.log(a) console.log(B)</pre>	
<pre>var score = 10; var score = 5; var score = 11; console.log(score)</pre>	

**Skill 15.05 Exercise 1**

Indicate what is printed for each of the following. If an error occurs, indicate the error and why.

<pre>var x = 2 var y = 3 var z = x + y</pre>	
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<pre>x = x + z console.log(x+1)</pre>	
<pre>var x = 1 var y = 5 var z = x - y x = x - z console.log(x-1)  var x = 2 var y = 3 var z = x ** y x = x * z console.log(x*2)</pre>	
<pre>var x = 9 var y = 3 var z = x/y x = x/z print(x/3)</pre>	
<pre>var x = 11 var y = 3 var z = x%y x = x%z print(x%2)</pre>	

Skill 15.06 Exercise 1	
Indicate the variable type printed for each statement	
console.log(3.14)	
console.log ("four")	
console.log( "6.0")	
console.log(-8*2)	
console.log(10/5)	
console.log(-22345)	
console.log( "5")	

Skill 15.07 Exercise 1
Write code to
(a) Concatenate two strings 'Hello' and 'World' inside a console.log statement
(b) console.log() 'Hello' and 'World', but make sure to use string concatenation to also include a space ( ' ') between the two words.

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<b>Skill 15.08 Exercise 1</b>
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Indicate the output of the following
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<code>console.log(" Blah "+ 5+10 + " Blah Blah " + 5+10);</code>	
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<code>console.log(5*10 + " Blah Blah " + 5*10);</code>	
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<code>console.log(" Blah "+ 10-5 + " Blah Blah " + 10-5);</code>	
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<b>Skill 15.08 Exercise 2</b>
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The code does not work as intended. Fix the code.
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<code>var x = "5"; var y = "5"; console.log(x + y - 10);</code>	
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<b>Skill 15.09 Exercise 1</b>
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Write code to prompt a user for 3 pieces of information. Concatenate the pieces of information into a new variable called result, the print result.
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<b>Skill 15.10 Exercise 1</b>
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Re-write the following in pseudocode,
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<code>var x = y = z = 5 console.log(x) console.log(y) console.log(z)</code>
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