**Section 7 – Quiz**

**Variables Quiz**

**Yippee! You've come such a long way.**

Variables are the names you give to computer memory locations which are used to store values.  Why is this important? Well, say you want to store two values, "Wally" and "Warthog", in your program and at a later stage you want to use these two values. To do this, you need to store these values somewhere. This is where variables come into the picture.

**In other words, you can think of variables as placeholders.**

It's quite a simple concept, but there's a lot to variables. JavaScript is a dynamically typed language, so we generally don’t have to worry about assigning the type of data that is being stored in that variable. However, knowing the types makes debugging a lot easier. And that's why in one of our earlier sections we learn't about the different data types.

Enough talk.

Enjoy these questions and I'll see you in the next section.

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Question 1:

What is a **variable**in JavaScript?

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**It is a function in JavaScript that executes an alert.**

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**A variable is like a container. All it does is store a value for you, so you can use it again later.**

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**A variable is just a fancy word for saying that JavaScript allows you to use various methods to execute similar tasks**

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Answer: B - JavaScript uses reserved keywords to declare a variable, such as LET and CONST. You can assign a value to a variable using equal to (=) operator when you declare it or before using it.

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Question 2:

What  are the 3 ways you can declare a variable in JavaScript?

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**You can declare a variable using the var, class and object keywords**

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**You can declare a variable using the class, let and function keyword**

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**You can declare a variable using var, let and const**

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Answer: C - Nice! Before the advent of ES6, var declarations were the only way to declare a variable. There are issues associated with variables declared with var, though. That is why it was necessary for new ways to declare variables to emerge. ES6 defined two other ways to declare variables - using let and const.

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Question 3:

Which of the below is a valid way to define an age variablewith value **33**?

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**let age! = 33**

* 

**let a\_ge = 33**

* 

**let 10age = 33**

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Answer: B - Although generally we are unable to use symbols to define variables, we are allowed to use $ and \_

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Question 4:

What is an example of defining a variable using camel case?

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**carModel**

* 

**car\_Model**

* 

**carmodel**

* 

**carMoDaL**

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Answer: A

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Question 5:

What  is the difference between an **undeclared variable** and an **undefined variable**?

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**They are both the same.**

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**Undeclared variables do not exist in a program and are never declared. If the program tries to read the value of an undeclared variable, then a *runtime error*occurs.**

**Undefined variables are declared in the program but have not been assigned or given any value. If the program tries to read the value of an undefined variable, an *undefined*value is returned.**

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**Undeclared variables are not allowed to be reassigned a new value.**

**Undefined variables can be reassigned later.**

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Answer: B - Correct. Try typing the letters abc in your console without any var, let or const keyword. You will get a runtime error as it will be undeclared. Now try type 'let abc' and you'll get undefined. Hope this is starting to make sense.