JavaScript 1

1. Name the three ways to declare a variable?

Var, let and const.

1. Which of the three variable declarations should you avoid and why?

Var, since it is global scope.

1. What rules should you follow when naming variables?

They should be specific, descriptive, concise, lower case and use camel case, containing only letters, numbers and the symbols $ and \_, preferably in English.

1. What should you look out for when using the + operator with numbers and strings?

Unexpected results/behavour due to type mixing, eg 10 + “8”=108

1. How does the % operator work?

It calculates the remainder from an operation eg: 5%2 =1

1. Explain the difference between == and ===.

== checks if 2 variables have the same value, === checks if they have the same value and type. This lets us differentiate between, for example 0 and false.

1. When would you receive a NaN result?

You tried to do math involving an undefined variable.

1. How do you increment and decrement a number?

Increment: x++ , decrement: x—

1. Explain the difference between prefixing and post-fixing increment/decrement operators.

Prefixing does the maths, then returns the result, postfixing returns the value, then does the maths, which makes it use slightly more memory to store a temporary variable with the value.

1. What is operator precedence and how is it handled in JS?

Precedence describes the order in which operations are carried out in a statement that contains more than one of them. Precedence is determined by the precedence table, with higher entries having higher precedence

1. How do you log information to the console?

Console.log(message)

1. What does unary plus operator do to string representations of integers?

It lets us convert it’s operand to a number, eg: const x = 5; lety= +x;

Results in a number.

1. What are the eight data types in JavaScript?

String, number, bigint, Boolean, null, undefined, symbol, object

1. Which data type is NOT primitive?

objects

1. What is the relationship between null and undefined?

Null is something that doesn’t exist, undefined exists but has no value

1. What is the difference between single, double, and backtick quotes for strings?

Backticks let us embed variables in our strings using ${}, the other 2 don’t and are mostly the same, except for use inside strings and json

1. What is the term for embedding variables/expressions in a string?

Concatenation.

1. Which type of quote lets you embed variables/expressions in a string?

Ones in backticks.

1. How do you embed variables/expressions in a string?

IN `` we use ${}, in “” or ‘’ we have to close the string use +, add the var, another + and then “ to continue.

1. How do you escape characters in a string?

Using a backslash before the special char

1. What is the difference between the slice/substring/substr string methods?

How they behave, eg: substr will swap the params if the endpoint appears before the start, while slice will return empty, NaN is treated as 0 in substr, in slice if start is negative it will be placed at the end of the string.

1. What are the three logical operators and what do they stand for?

&& and, || or, ! not

1. What are the comparison operators?

== and ===

1. What are truthy and falsy values?

Values that evaluate as true or false, eg: 1=true, 0=false.

1. What are the falsy values in JavaScript?

False, 0, empty strings, null, undefined, NaN

1. What are conditionals?

Statements that perform certain actions if a condition is met.

1. What is the syntax for an if/else conditional?

If(condition){action}else{action}

1. What is the syntax for a switch statement?

Switch(value){case x:action;break; default:action;break;}

1. What is the syntax for a ternary operator?

?, it is used as a shorthand for using an if statement to assign values, it takes the format: condition? Value if true : value if false

1. What is nesting?

Nesting is when a statement contains another instance of the same kind of statement, eg nested if statements.

1. What are functions useful for?

For allowing us to call sections of code, especially if we want to re-use it, eg:

We could have function ComplicatedSum(number); and use it to perform said sum on 3 different numbers instead of writing the whole thing out 3 times.

1. How do you invoke a function?

It’s name followed by (), eg: SayHello();

1. What are anonymous functions?

Functions without names, useful for when you want a var to have a function.

1. What is function scope?

The portion of your code in which a function is visible/useable.

1. What are return values?

The values we assign for a function to output when it is complete.

36.What are arrow functions?

A way of writing shorter syntax for our anonymous functions.